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LEADING IN QUALITY AND UNIFORM DEPENDABILITY

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(ALLEGHENY COUNTY), Pa

FEBRUARY, 1947

Now - ANOTHER POINT ADDED TO HACKNEY SUPERIORITY

Minimum seam area welding

Y. Ray controlled welding

X. Ray controlled welding

X. Ray controlled welding

X. Ray controlled welding

Attractive appearance between

Verfect balance had adequate

Perfect weight and adequate

light weight

Attractive

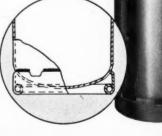
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Attractive

• Yes, there's still another reason for the popularity of Hackney Cylinders. It's this new foot ring... shown in the cross-section at the right. It permits better ventilation, easier cleaning, lower cylinder maintenance costs, complete inspection of bottom head. To insure strength and minimize corrosion, all points of contact between foot ring and cylinder are completely welded.

It's another real reason for buyers preferring Hackney. Another important reason added to minimum seam area ... X-ray controlled welding ... attractive appearance ... a perfect balance between light weight and adequate strength.

These advantages are due to Pressed Steel Tank Company's exhaustive study of the Butane-Propane industry ... resulting in a sturdy and light weight cylinder tailormade to your requirements.



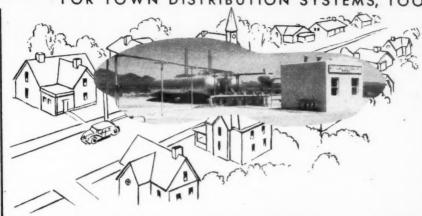
Pressed Steel Tank Company

Hackney

Main Office and Plant: 1487 South 66th Street, Milwaukee 14
1399 Vanderbilt Concourse Bldg., New York 17 • 227 Hanna Bldg., Cleveland 15
552 Roosevelt Bldg., Los Angeles 14 • 208 S. La Salle St., Room 2069, Chicage

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The COMPACT, Lightweight ROCKWELL-EMCO
No. 00 LP-Gas Meter

with pressure cast aluminum alloy case

No longer is it necessary to use bulky meters of light gauge steel or heavy cast iron types to measure the domestic consumption of LP-gases. The new Rockwell-Emco No. 00 Meter has changed all that. Here's a meter specifically designed for this job. It is small and light in weight to save in handling and shipping. It is attractively cased in a housing of aluminum alloy. It is rust-proof, corrosion-proof, and has high fracture resistance for safety. It is easily repaired. It has ample capacity—will measure up to 90 cfh of 1.5 specific gravity gas at ½" pressure absorption.

Write your nearest sales office for Bulletin 1163.

PITTSBURGH EQUITABLE METER DIVISION

Rockwell Manufacturing Company Pittsburgh 8, Pa.

Atlanta, Boston Chicago, Houston Kansas City, Los Angeles, New York, Pittsburgh San Francisco, Seattle, Tulsa



The Rockwell-Emco No. 00 Meter measures a mere 8" long x 7-7/16" wide x 10-5/16" high. It weighs only 8 lbs.

FEBRUARY - 1947

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BUTANE-PROPANE News



Reg. U.S. Pat. Off.



Publication Office

LOS ANGELES (14)—1709 W. Eighth St. Phone: DRexel 4337

Branch Offices

CHICAGO (3)—1064 Peoples Gas Bldg. Phone: WAbash 2589 DAVID CARMEN, Manager

NEW YORK (17)—111-115 Broadway Bldg. Room 1525 GERARD A. REGAN, Manager

DALLAS (1), TEXAS — 301 Southland Life Bldg. Phone: Central 4585 ROBERT B. FARSON, Manager

Editorial

ELLIOTT TAYLOR, Editorial Director 111-115 Broadway Bldg., Room 1525 New York (17), N. Y.

LYNN C. DENNY, Editor
PAUL LADY, Assistant Editor
H. W. WICKSTROM, Technical Editor
C. C. TURNER, New England Editor
O. D. HALL, Mid-Continent Editor
FREDERICK L. DALTON, Art Director

Executive

JAY JENKINS, President and Publisher JAMES E. JENKINS, Secy.-Treas.

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Lincoln Didn't Know About ANCHORGAS

... So he studied by the light of the flame in the fireplace. Today's lighting is simplified with Anchor Butane-Propane, which also contributes to better heating, cooking and refrigeration.





National 300-gallon Sphere



National 499-gallon Tank



National 1000-gallon Tank

Announcing ...

Butane - Propane Tanks ... made by National Tube Company

'I HE unprecedented expansion of the Liquefied Petroleum Gas Industry brought numerous requests to National Tube Company, long experienced in making pressure vessels, to manufacture L P Gas Tanks. This is a natural outgrowth of our business during the war when National produced hundreds of thousands of pressure vessels of all kinds to the most exacting specifications.

Today, one of our most modern plants has been converted to manufacture L P Gas Tanks of the latest design. Tanks are now coming off the production line to join the list of famous National Tube products for peacetime use. THREE TANK SIZES are being made—the 300-gallon sphere, and the 499-gallon and 1000-gallon cylindrical tanks with hemispherical heads. All three tanks are 51 inches incide disputer.

inside diameter

inside diameter.

200-POUND WORKING PRESSURE—This is the highest pressure required for any commercial L P gases. Accordingly, all National tanks will be made to this pressure for your safety and also will be made to A.S.M.E. Code for unfired pressure vessels for 200-pound working pressure. In addition, they will meet all the requirements of the National Board of Fire Underwriters and will bear their label.

MADE FROM THE FINEST STEEL—The U·S·S trademark assures finest quality steel which will meet all requirements as specified by the American Society for Testing Materials A-70-44 flange quality specifications.

LIGHT WEIGHT—A spherical design produces a tank of

any given capacity that is much lighter in weight than other designs.

GOOD APPEARANCE-Spherical tanks and tanks with spherical ends are pleasing to the eye when exposed on the home lot. In addition, each tank will be given a protec-

tive primer coat to maintain its pleasing appearance.

COMPLETELY EQUIPPED—All fittings, including the regulator, are attached. Tanks are air tested at the proper pressure after fittings are attached to assure their tightness for your protection.

WRITE FOR COMPLETE INFORMATION to National Tube Company, Frick Building, Pittsburgh, Pa.



PITTSBURGH, PA.

Columbia Steel Company, San Francisco, Pacific Coast Distributors United States Steel Export Company, New York

NITED STATES

-LOOK-READ this advertising

Yes, we know your customers are going to read the new Servel Gas Refrigerator ads. And here's why we know . . .

We pre-tested them. Hundreds of persons were shown all of America's advertisements for refrigerators—including the 1947 campaign for the new Servel Gas Refrigerator. Four to one, readers picked the new 1947 Servel campaign as the ads they liked best.

Now these new ads will reach your public again and again during 1947. Ads will continue in The Saturday Evening Post, Better Homes and Gardens, American Home, Good House-keeping, Woman's Home Companion, House Beautiful, House & Garden, Look, True Story, American, Cosmopolitan. They'll tell the story of the wonderful new Servel Gas Refrigerator to 23.663.544 families a month!

You'll get giant-size reprints of these ads. Get them out front each month, where shoppers will recognize and remember Servel's advertising in their favorite magazines.



NOW AVAILABLE!

This <u>combination</u> LPG system is preferred by owners and dealers

- A 2-Way System—permits use of either butane or propane, whichever is cheaper and more easily obtainable.
- 2. Efficient, Dependable, Safe—combines advanced engineering and quality allwelded construction. Not one has ever failed in service.
- 3. A Permanent Investment—highest quality materials and workmanship assure long life and trouble-free service.
- 4. 20,000 Now in Use—manufactured by A. O. Smith, a company that for 70 years has pioneered the development of welded steel products.*



SMITHWAY COMBINATION LPG SYSTEMS

One simple, compact SMITHway System supplies gas for *all* needs of homes, farms, and ranches.

Bigger (250 to 500 gal.), more economical, a SMITHway System means low-cost gas for cooking, hot water, heating, refrigeration, power, flame cultivation, and other uses. It brings all the advantages of metropolitan gas supply to rural areas.

Two types are now available. SMITHway Aboveground Systems and Underground Systems are new heavy-duty types in three standard sizes: 250, 375, and 500 gallons.

Send for complete details today. Write the A. O. Smith office nearest you.

The A. O. Smith Corporation manufactures Permaglas LPG Water Heaters with mirror-smooth tanks of sparkling blue glass-fused-to-steel.





A.O. Smith

ATLANTA 3 - CHICAGO 4 - BALLAS 1 - NOUSTON 2 - LOS ANGELES 14 - MIDLAND 5 NEW ORTEANS 18 - NEW YORK 17 - SEATTLE 1 - TULSA 3 INTERNATIONAL DIVISION, MILWAUKEE 1

* Michers of Auto Frames, Pressure Vessels, Line Pipe, Gil-Well Casing, Brewery Tanks, Welding Equipment, Stokers, Permaglas Water Heaters



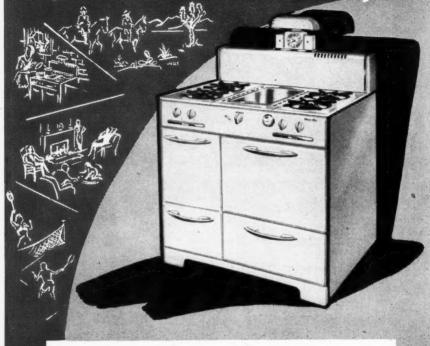
Wes, one woman tells another about the two-oven capacity, the Charcolator Broiler, the Safe-Tee-Kee Burners and other GRAND features... and the popularity of GRAND Gas Ranges grows at an ever-increasing rate. But we don't rely on word-of-mouth advertising alone. Starting next month, a great campaign of Mass-Telling in leading national magazines will be added to GRAND'S stepped-up Mass-Selling program. Dealers who are aiming to go places in the gas range business are invited to get on the GRAND—wagon now.



GRAND heartily supports the
CP ("Certified Performance")
range program. GRAND Gas
Ranges are available both for
city gas and LP "Bottled" gas.

GRAND HOME APPLIANCE CO.
CLEVELAND 4, OHIO

for Western Living



Western-Holly is the gas range for western living. All-round efficiency, timed by a signal clock, gives you more hours of leisure, and leisure is a feature of western living. A top griddle and an extra large oven make possible the preparation of those manly

meals that are a delight of western living. While fine construction throughout makes for greater ease of cooking, and ease is one of the good things of western living. See this range at appliance and department stores which feature...

Western-Holly GAS RANGES

Products of WESTERN STOVE COMPANY, Inc

LOS ANGELES - SAN FRANCISCO - PORTLAND - SACRAMENTO - FRESNO - SAN DIEGO

Converight 1946 by Western Stove Company, Inc.

LETTERS

Gentlemen:

We have two 30,000-gallon propane storage tanks, and use about four tank cars of propane each week.

Our storage tanks have been in use for three years and I would like to know how often these tanks should be purged, or if it is necessary to purge them.

R.R.C.

Ohio

It is not necessary to purge storage tanks unless it is found that moisture has accumulated. Some manufacturers provide a drain in the bottom of their bulk tanks which has a ½-inch connection with a ½-inch plug valve, made specifically for draining, when such is necessary.

If you withdraw fuel from the bottom of your storage tank there probably will never be any moisture accumulation.

Even in cases where purging is done, the operation is usually not repeated for five years unless impurities in the fuel are known to exist and trouble develops.—Ed.

Gentlemen:

We are receiving an increasing number of inquiries from parties wishing to install cash-and-carry propane systems for cooking purposes on boats and in automobile trailers.

Do you know of any set of regulations specifically covering installations of these two types? The problems that arise are somewhat different than in the ordinary domestic installation. We have heard, for example, that certain marine insurance companies require that for shipboard service the cylinders must be mounted on deck, in a special type of enclosure.

We have been unable to locate anything tangible, however, on this subject. The number of jobs being put into trailers and on boats leads us to believe that there must be some set of rules established to insure the safety of the installation, and we would appreciate anything you can advise us on the subject.

D.M.S.

New York

The Interstate Commerce Commission has recently issued an order to the effect that liquefied petroleum gas installations on automobile trailers must conform to ICC Codes covering tanks if the trailers are moving on highways. This means that an ICC cylinder must be used except where the trailer is permanently located in a given place.

It is true that cylinders shipped on ocean going vessels are required to be stored on deck but evidently this does not cover the use of the fuel in the galley or for power. I do not know of any large vessels which are using LP-Gas for power but it is sometimes used in small craft and it is frequently used in small craft for cooking purposes.

I suggest that you make specific inquiry regarding codes covering marine use from the U.S. Coast Guard. You can undoubtedly get this information from the New York office of the Coast Guard.—Ed.

Gentlemen:

We are interested in expanding our sales on butane-propane equipment and are setting up a special department to handle this equipment. From time to time we receive inquiries from our various customers throughout this territory for data on typical bulk plant installations, and we are wondering if you have an office which can supply us with this information.

What we would like to get is plans and specifications for various types of installations, which we can discuss with our customers. If you do not have such information available, we would appreciate your advising us the name of others who may be able to furnish it.

E.K.G.

Georgia

We do not have any such specifications available. From time to time we have carried stories in "BUTANE-PROPANE News" covering specific installations of bulk plants and I am enclosing tear sheets of a couple of these for whatever they may be worth to you.

It is also possible to obtain some help along this line from the fuel suppliers who are selling into this industry and possibly from bulk tank manufacturers. However, the probable reason that more plans and specifications are not available is that it is usually true that every individual bulk plant has to be laid out to conform with local conditions and local laws. This means that the individual requirements of the dealers demand a special examination of existing conditions so that their needs can be fully met.—Ed.

Gentlemen:

If it is not too much trouble we would like your opinion or that of your technical editor on the following problem:

We have available a liquefied petroleum gas of the following com-

Propylene	1.0	wt.%	1.3	vapor	Vol.9
Propane	1.0	66	1.3	"	44
Isobutylene	0.2	46	0.2	44	44
Butadiene	0.3	66	0.3	66	66
n-Butylene	10.1	66	10.4	44	66
n-Butane	51.0	66	50.5	44	64
i-Butane	36.3	44	35.9	44	44
Pentane	0.1	66	0.1	44	66

In mixing the vapor of this LP-Gas with air to give a Btu of 1775, could you tell us how high a gage pressure we could go without experiencing condensation of the lower vapor pressure elements?

F.D.H.

Ontario

A technical analysis based on the compostition of the liquefied petroleum gas submitted shows that condensation cannot be eliminated or even reduced by increasing the gage pressure on the LP-Gas-air mixture. The dew point (temperature at which condensation begins) for the 1175 Btu air-mix is as follows at several gage pressures:

Lbs. Gage	Dew Point					
Zero	Minus	27°	F			
50	Plus	40°	F			
100	Plus	72°	F			

The combination of low winter temperatures and normal storage pressure on the mixture could result in the condensation of liquid hydrocarbons on the walls of the storage vessel. This condensation in pressure storage may be eliminated by using one or more of the following expedients:

- 1. Insulate the pressure storage tank.
- 2. Utilize an LP-Gas containing a larger percentage of propane, especially during winter periods.
- 3. Produce an LP-Gas-air mixture of lower heating value, which would have a lower dew point.

The decision to use one or any combination of the above expedients would depend on the local economics of the situation and the source of supply for the fuel gas. In any event, a move to eliminate condensation in pressure storage would guarantee freedom from condensate in distribution lines since these lines are generally operated at lower pressures and are generally protected from extreme atmospheric temperatures.

The gas composition indicates small percentages of the unsaturated hydrocarbons propylene and butylene and a small amount of butadiene. These constituents are not expected to be present in LP-Gas from natural gas sources but may be present when such gas is reformed or cracked or is obtained from oil refinery sources. However, the small amounts of these gases if reported in error, do not appreciably affect the determination of dew points.—Ed.

Gentlemen:

I have ordered a water jacket type cylinder tester and would like to know how to remove all moisture from cylinder before putting it back on the line. Would also like to know where to write to get the authority to test bottles that will pass ICC rules. I imagine one would have to get a permit before he would be allowed to test.

Your "Letters" department is worth

more to me than the price of a year's subscription, besides all the other information that can be found in the rest of the magazine. You are assured of my subscription as long as I stay in the gas business.

T.C.W.

Wyoming

Inquiry shows that the simplest way to keep from having moisture in your cylinders after testing is to use paint thinner instead of water. If water is used a common method is to install a compressor and force into the cylinder air which has been subjected to flame heat.

The paint thinner method is not expensive because the product is cheap in the first place and it can be used over and over again. A local firm which tests cylinders uses No. 350, Standard Oil Co, paint thinner.

In order to conform with ICC regulations, you should address a letter to H. A. Campbell, chief inspector, Bureau of Explosives, 30 Vesey St., New York 7, and tell him that you wish to install a testing station.

In this same letter you give him the initials or number or other symbol you wish to stamp on the cylinder to distinguish your testing from that of other stations so that cylinders you have tested can always be traced back to you. Mr. Campbell will register your station and your symbol. I think you also have to have a serial number which you use and stamp that on the cylinder as well as the name of the owner. It would also be good policy for you to notify your district inspector for the ICC after you hear from Mr. Campbell.

Gentlemen:

We are installing aboveground propane systems and are having an awful lot of trouble with interruptions in the lines since cold weather has arrived. We have been adding alcohol—1 pint to every 100 gallons propane—but this has not remedied the trouble, so are now putting glycerin in the spring bonnet of the regulators but have not found out whether or not this will remedy the trouble.

This interruption of line service gives us great cause for alarm since we have quite a few space heaters in operation that do not have automatic controls and are wondering whether or not there may be some sort of control available that will automatically close the supply line if it were installed somewhere ahead of the appliances if the regulator pressure became too low to operate any appliance.

A.S.

Illinois

The Bastian-Blessing Co., 4201 West Peterson Ave., Chicago 30, makes such a valve and, therefore, I suggest that you contact that firm for the equipment you need.—Ed.

Gentlemen:

We have been unable to locate any firm in Oregon that is equipped and approved to test propane gas cylinders and put the required stamp on them that is required to pass the state labor department inspection and/or the ICC requirements.

There must surely be one or more firms in California who are prepared and willing to do this type of testing. Please give us the address of two or more of these firms, preferably ones that are in northern California and therefore closer to us.

As you know January 15th is the deadline on these older cylinders that have not been tested in the last five years. We are therefore most anxious to get lined up for our needed tests.

O.S.

Oregon

We regret to say we do not know of any firm in Oregon prepared to test ICC cylinders. In Los Angeles the Imperial Gas Co., 3673 Ninth Ave., tests cylinders. Whether or not there is a similar firm in northern California we cannot say but we suggest you write to your supplier in northern California. He should know.—Ed.

 BUTANE-PROPANE Nows welcomes letters from our readers, but it must be understood that this magazine does not necessarily concur in opinions expressed.—Editor. the Supply Source for the L-P-G Industry



To the Industry

An answer to the need for a single source of supply with complete lines of equipment; a sales engineering department rendering services advising on, or designing and supplying individual pieces of equipment, as well as complete municipal and bulk plants.

To L-P-G Dealers

A complete line of reliable supplies and equipment backed by national advertising and promotion.

To L-P-G Manufacturers

An outlet for quality products needing national representation; merchandising methods which will lower your distribution and sales costs.

These Items for Prompt Shipment

Storage Tanks, Truck Tanks, Systems, Domestic (all sizes), Pacific Tanks, 20-lb. Trailer Bottles, A. O. Smith Tanks, Deep-Fat Fryers, Bakery Glazers, Hot Plates, Floor Furnaces, Small Space Heaters, Water Systems, Generators, Propane Pumps, Regulators, Valves, Fitting (all types), Do-Nut Fryers, L.P. Gas Hose.



ANCO MANUFACTURING & SUPPLY COMPANY

Atlas Life Bldg.

Tulsa, Okla.

COMMENT

MONTANA dealers have lifted a leaf from the data book of the Colorado Liquefied Petroleum Gas Association—intentionally or unknowingly—in order to gain a greatly desired end.

That end is safety, the highest goal at which this industry can aim.

Forming an association for the furtherance of their own best interests, Montana leaders astutely and diplomatically invited state senators and representatives to the organizational meeting on Dec. 17. These law makers were frankly told that the distributors wanted some sound laws passed to protect the public and the industry, alike.

And the legislators just as frankly replied they would help do this job.

The important point is that the procedure was a good one—one that can be imitated by dealers in other states. The Montana men did not wait until unfriendly laws had been enacted and then protest them. They did not put themselves in a defensive position. Instead, in essence, they said, "Our industry and the public need every safeguard against accidents. We will give you our best advice and you write the laws."

Any conscientious legislator, thus approached, would strive to give the industry a fair break and that's all LP-Gas men want.

Legislation is going to come up in state after state, as time goes on. It behooves dealers, through their state associations to work with legislators in framing equitable laws so the industry will be protected, the public will be protected and the occasional chiseling operator will be uncovered.

If you haven't a state association, it would be a good idea to get one!

The Kansas LP-Gas Association is preparing to aid dealers in carrying directly to consumers a campaign for larger storage at point of use. Newspaper space will be used to do this.

At the Jan. 6 meeting of the Association, President Si Darling appointed a committee to aid the campaign.

Those dealers who were farsighted enough to install large storage and get in fuel last fall will not suffer from the current tank car shortage.

All last year, BUTANE - PROPANE News preached larger storage. The suppliers begged their customers to build larger storage. National associations warned dealers what was coming.

Yet, dealers went on making installations, obligating themselves for fuel deliveries, but not taking the precaution to protect themselves against the very emergency they were warned would come, and did come.

Well, there's another year ahead. Let's start harping again on the industry's three greatest needs:

Safety.

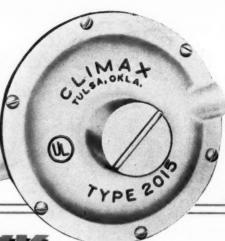
Larger propane storage.
A better balanced load.

By Ed.

TYPE 2015—for reducing storage pressure to appliance operating pressures.

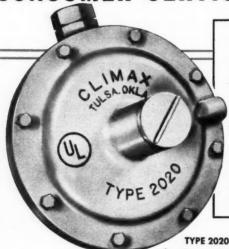
Compact design especially desirable for use with bottles.

Can be furnished with ½" N.P.T., ¾" N.P.T. or .970 P.O.L. inlet connection. Orifice suitable for propane. butane or propane-butane mixtures. Regulator is completely tested and set at factory for standard operating conditions. Send for Bulletin 504.



Climax L.P.G.

CONSUMER SERVICE REGULATORS



SAFE Approved and listed by Underwriters' Laboratories Re-examination Service. Tested to withstand pressures in excess of 300 p.s.i.

DEPENDABLE Designed by engineers with years of experience in the field of automatic controls where performance is essential.

PRECISION BUILT Special zinc alloy bodies and precision machined internal parts made by craftsmen skilled in the manufacture of regulators and control equipment.

PROMPT DELIVERIES now being made. Bulletins give complete specifications, construction and performance data. Write for copies. Type 2020—Bulletin 503. Type 2015—Bulletin 504.

TYPE 2020—for reducing storage pressure to that utilized in distribution system.

Especially adaptable for aboveground and underground storage tanks where greater regulator capacity is desired. Can be furnished with ½" N.P.T., ¾" N.P.T. or .970 P.O.L. inlet connection. Available with orifices for propane, butane and propane-butane mixtures. Regulator is completely tested and set at factory for standard operating conditions. Send for Bulletin 503.



CLIMAX INDUSTRIES, INC.

L. P. G. DIVISION 15 North Cincinnati Avenue TULSA, OKLAHOMA

BEYOND THE MAINS

By ELLIOTT TAYLOR

All Tell All

As an instrument for the elevation of erring mankind we are by nature opposed to the snitch—a

mean little social instrument that has long been discredited because in its application it invariably degenerates into a petty tool of personal spite and a weapon of professional jealousy.



Old guys among us with personal recollections of the golden era of national prohibition will recall that the investigators of the U.S. Treasury department -the Prohis as we called them —tried unsuccessfully to awaken the public conscience to its duty to act as informers on those who violated the 18th Amendment. About all the law got out of it was a mass of anonymous calls. mostly from bootleggers who were gleefully taking advantage of the opportunity to put the finger on their more successful competitors in the rowdy but happy speakeasy days.

The OPA of more recent memory tried the same thing, but also with notorious lack of success. It's a wonder, too, because with typical Newdeal cunning that august agency added the potent inducement of a substantial cash bonus to anyone who turned in a price-ceiling violator and who was willing to stick with the case until it was tried through the courts to a conviction.

As we recall it, the witness was supposed to get three times his overcharge back—a better deal than the double-your-money guarantees that are now being featured on radio programs. But by and large there were very few takers. It just isn't a concomitant of human nature in America to be an informer, and no assignment of lofty motives seems to be able to correct that unfortunate concept of personal and private ethics.

And so, while we are heartily in sympathy with the motives, and have ourselves labored diligently for the objective glimpsed, we predict little success for the new self-policing plan that is being tried out by the technical division of the Liquefied Petroleum Gas Association, as announced late in December in a letter to all members in which they were invited and urged to "advise the Chicago office of any verifiable operation

...in violation of any applicable statute, regulation or safety standard such as NBFU Pam-

phlet 58."

According to the letter, it is the intention of the association upon receipt of complaints "to request an investigation by proper authority without identifying the source of information and certainly without any implication of offense attached to any

person or company."

Maybe it is meant to be reassuring but that "without implication of offense" part doesn't quite ring true. If anyone ever turned us in to the coppers, or to any other "proper authority," do you know what we would think? We would think that the implication was that we were just guilty as hell, as charged, and that the informer would be sitting back hoping that the judge or whatever "proper authority" had the right to do it. would throw the book at us when we were called up on the carpet.

Nobody knows any better than we do how badly the industry needs self-policing. But we still cling to the hope and confidence that that self-policing can be accomplished through education. through inspiration and proper guidance, encouraged and abetted by those who because of their experience, their superior technical knowledge and their unselfish interest in the future of liquefied gases, are in a position of both opportunity and obligation to labor for the elevation of service standards.

Sending a state or local enforcement officer around to investigate a substandard installation is not in any sense self-policing—it is in actuality calling public attention to a situation that might conceivably have been corrected by so simple a thing as bringing to the offender's attention the error and the danger of his faulty installation

practice.

We believe in open and above board dealing. It may be a good idea to have substandard jobs reported to the association, but only when and if the association is able to send its own men out to first verify the legitimacy of the complaints, and then to give the offenders an opportunity to correct their errors. Should any installer still persist in maintaining a condition that is prejudicial to public health or safety, even in the face of such warning, it would be time enough then to report him to the proper authorities, and to let him know in advance that precisely that would happen.

Fully conscious of the problem that confronts the industry in the alarming disregard for safety that some dealers and even some distributors display. we sympathize with this sincere effort of the Liquefied Petroleum Gas Association to work toward mandatory compliance with higher standards. But we do not believe that the desirable ends can be achieved by inviting informers to jump on their competitors or by calling in the law to crack down on inadvertance and ignorance.

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Let us have more and more labor in behalf of industry education; let any or all of the gas associations make provisions to unite the dealers, even the smallest of them, in some kind of an organization to which they can look for guidance and support; let those best able to pay, who have the most to gain and the most to lose by the success or failure of propane progress, prepare to distribute to every hand that will accept it all of the information that can be used to build a better gas business.

Then after all this has been done, and when those whose brilliant commercial successes are matched by ethical concepts and operating practices that all of the lesser lights may emulate and aspire to, it will be time enough to call in the law. And by then it will probably not be necessary.

A Lot of Quarts

ONE of the problems that bothers the master minds of the gas and electric utilities in the cities comes out of their contemnlation of the mysterious magic that has put propane and butane across in such a phenomenal way in the past few years.

We looked in on the Pennsylvania Farm Show in Harrisburg a few weeks ago—an annual event that brings out half a million farmers, would-be farmers,

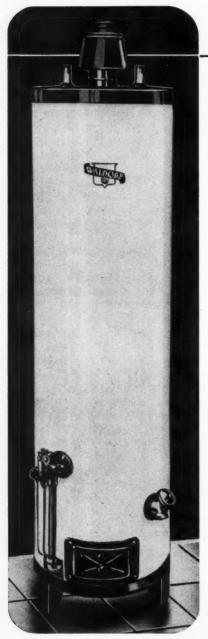
their wives and their children, and we think we came up with one of the answers.

In a contest sponsored by the Society of Farm Women of Pennsylvania, for the distinction of being the individual canner of the largest amount of food in the state, the winner who walked off with the honors was disclosed to have preserved 1800 quarts of fruit, vegetables and meat during the year. Runners-up were no pikers either, one with 1360 quarts to her credit, and another who had put up 953 jars.

We are not sure that they all used bottled gas, but we do know that they are the kind of people who do buy bottled gas.

The dainty dolls in the gas and electric utility advertising who toss an already prepared, semisolid, predigested concoction into a pan, set a time switch and leave the house for a day of golf and bridge may be the exponents extraordinary of the age of new freedom. But they aren't cookers with gas or with electricity; they are merely female impresarios of the warmed-over school of dietetic thought and their frugal use of cooking fuel shows it.

Bottled gas is rooted in the same tradition that makes 1800 quarts of canned stuff a matter of pride and satisfaction. And as long as bottled gas stays there, its dealers don't have to worry about "going to town"—they are better off in the country.



Announcing

THE NEW, POST-WAR



WATER HEATER USING L-P GAS

Here's the modern water heater for the modern heater fuel. Tops in efficiency, appearance and construction detail. Operates on L-P gas from underground tanks or portable cylinders. Note some of the features that make the Waldorf a good deal for the dealer, a best-buy for his trade:

- Positive, snap-action thermostat with graduated dial for water-temperature.
- 100% safety electro-magnetic "Baso" thermo-couple control. In case of gas failure it shuts off both pilot and main burner.
- Insulated with blanket of heat-retaining fiber-glass.
- Slotted, cast-iron, bunsen-type burner of most modern scientific design.
- · Approved by American Gas Association.

WALDORF HEATER CO.

1421 Chestnut St., Philadelphia 2, Pa.

Coal, Electricity Outpointed By Propane at Prep School

MAJOR cooking installation replacing a coal-fired kitchen at the Pomfret Prep School, Pomfret, Connecticut, has been operating on propane gas since January, 1946. The job was sold in competition with electricity. Figures on the installation have been supplied by Arthur P. McGowan, of Lehigh Gas, the bottled gas division of the Lehigh Petroleum Co. The school enrollment at Pomfret totals 250 students, all of whom, with members of the faculty, are fed in the school dining room.

The coal-burning equipment in the kitchen had been consuming nearly two tons of coal a week at a cost of \$16 a ton, with a monthly fuel bill of approximately \$120. These ranges had to be kept burning 24 hours a day and required the services of two janitors.

With the new system installed, the fuel supply is completely automatic, trouble free, all appliances are heat controlled and gas is shut off as soon as cooking is completed.

Operation costs to date of all fuel for cooking with gas has been running less than \$90 per month on the basis of 18 100-lb. cylinders of propane at 5 cents a pound. This indicates a saving of over \$30 a month on fuel costs without taking into consideration the savings on

Two 250-gal, tanks of 200 lbs, working pressure set on permanent concrete foundation in rear of dining room at Pomfret School.



the wages for attendants necessary to maintain the coal installation.

The original installation and negotiations for sale, which were handled by Joseph A. Lucas, manager of the Putman branch of Lehigh Gas, included a 10-tank hookup with Bastian-Blessing automatic regulators, 5 100-lb. cylinders on supply and 5 on reserve.

The installation, itself, was made under severe handicaps as the Christmas-New Year holiday period selected for the job brought the worst snow storm of the year to the Pomfret region, with 18 inches of snow and near zero temperature. Under the supervision of Harry King, New England manager of Standard Gas Equipment Corp., the whole job was completed and put in working order in one day.

The kitchen equipment installed included a Vulcan "Lo-glo" ceramic broiler, deep fat fryer, one opentop and two closed-top sections of ranges with ovens. A custom-built steam table was also installed and a three-section Blodgett oven in which all of the baking is done. Lehigh Gas assumes entire responsi-



Vulcan heavy duty kitchen equipment installed in Pomfret school.



A Blodgett oven cares for the baking needs of the institution.

bility for the maintenance of the supply of gas fuel.

After a successful operation in the winter and spring of 1946, it was decided to remove the 10-tank battery of 100-lb. cylinders, installing in their place two tanks of 250 gals. capacity. Experience had shown that this would be adequate storage on the premises to provide sufficient reserve of supply during the winter months when the demand is heaviest and to eliminate the necessity for spot delivery by truck in case of heavy snowfall.

The two tanks made by the Mc-Namar Boiler & Tank Co., are U-69 Code, 200 lbs. working pressure, set on a permanent concrete foundation and manifolded together. They are, of course, equipped with pressure relief valves and liquid level gauges.

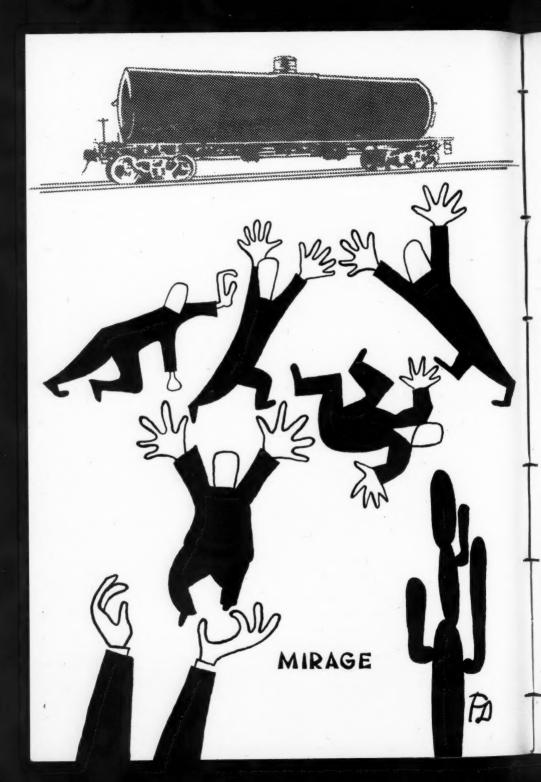
First LP-Gas Tanker Will Handle Ocean Shipments

PURCHASE of a Type C1A dry cargo ship which will be converted within the next few months into the world's first tanker designed solely for transportation of liquefied petroleum gases in coastwise and export trade, has been announced by Warren Maritime Corp., wholly owned subsidiary of Warren Petroleum Corp., Tulsa, Okla.

The cargo ship, constructed in 1944, was purchased from the U.S. Maritime Commission. The vessel is 416 feet in length, has a beam of 60 feet, a cargo capacity of 6700 tons, draws 23½ feet of water when loaded, and is powered with 4000 horsepower of oil-fired steam turbines, capable of driving the ship at 14 knots per hour.

Conversion will be accomplished by installing in the ship approximately 80 large capacity, high pressure cylindrical tanks. In order to make the installations, a sizeable portion of the deck and super-structure will have to be removed and then replaced after the tanks are anchored in place. The conversion will be done by the Pennsylvania Ship Yards, Inc., at Beaumont, Texas.

The Warren Maritime Corp. was organized in October, 1946, with N. K. Warren as chairman of the board and president, the other officers being: J. A. LaFortune, executive vice president; J. A. Padon, H. E. Felt, and G. L. Brennan, vice presidents; J. E. Allison, vice president and general counsel; A. J. Murphy, treasurer; John T. Oxley, secretary; Mr. Murphy and D. M. Mattocks, assistant secretaries; and Mr. Oxley and A. B. Clark, assistant treasurers.



Tank Cars In Short Supply

RECENTLY compiled statistics show that the current shortage of fuel that many dealers are experiencing is not due to lack of adequate LP-Gas, itself, but to insufficient transportation and storage facilities.

High pressure tank cars are in short supply!

The year 1946 showed great industry expansion — an increase of 270,000,000 gals.

This is equivalent to 27,000 tank car loads of LP-Gas.

The total demand for last year was 1,111,623 gals. (see BUTANE-PROPANE News January issue, Page 19). This would have required 111,000 tank cars to move, as against 84,000 for 1945 if all fuel had been transported by tank car. Transport tank trucks probably handled half of it.

The allocation by government agencies of many LP-Gas cars to chemical and other uses has also depleted the total number of cars available to haul butane and propane.

New cars on order will not be completed soon enough this year to provide much relief.

So there is a scramble for fuel!

ICC May Revise Regulations Covering Motor Carrier Safety

The Interstate Commerce Commission under Ex Parte No. M.C.-40 has published a notice of a proposed revision of the rules now embraced in Parts 1 to 7, inclusive, of the Motor Carrier Safety Regulations, according to an LPGA bulletin. This provision covers:

Part 192-Qualifications of drivers.

Part 193-Driving of motor vehicles.

Part 194—Parts and accessories necessary for safe operation.

Part 195-Reporting of accidents.

Part 191—Hours of service of drivers.

Part 196—Inspection and maintenance.

Part 197—Transportation of explosives and other dangerous articles.

In this notice, the Director of the Bureau of Motor Carriers is directed to prepare the revisions. Persons desiring to recommend changes in the present safety regulations by means of modification of particular rules or incorporation of new rules were required to submit such recommendations in writing to the Director on or before Feb. 1. Formal public hearing or hearings will be scheduled.

ICC Moves to Ease Tank Car Shortage

A year-end bulletin, issued by the Liquefied Petroleum Gas Association, states that as a result of the continuing appeal from industry and the various measures proposed by the Association for relief in the existing critical shortage of tank cars, the ICC has made provision to issue special permits, for a period of from Jan. 1 to March 15, 1947, upon application, to allow a maximum gage pressure of 110 pounds at 105 degrees Fahrenheit on 104A and 104 AW cars for the shipment of LP-Gas.

Such permits will be issued only after all requirements are met. Applications must show name of applicant and point of origin and be addressed to V. C. Clinger, Director, Bureau of Service, ICC, with copy to P. I.

Howard, Office of Defense Transpor-

tation, Washington, D.C.

While this provision will not cure the present transportation crisis, it will be of appreciable value, states Howard D. White, Association executive vice president.

Further relief is under consideration by Rubber Reserve Administration where it may be possible to assign additional modified cars to butadiene transportation with the concurrent release of some quantity of high pressure cars.

Will Paint Tank Car Domes White to Speed Movement

The following letter of Porter L. Howard, Liquid Transport Consultant in ODT, concerning pressure tank cars, is quoted for information and any desired action. It is dated Jan. 6.

Mr. W. C. Kendall Chairman, Car Service Division Association of American Railroads Washington 6, D. C. Dear Mr. Kendall:

We have today requested the American Petroleum Institute, National Petroleum Association, Liquefied Petroleum Gas Association, and Manufacturing Chemists Association to advise their members as follows:

"The Association of American Railroads has authorized the painting of domes 'WHITE' on Class ICC 104 modified, 104A and 105A pressure tank cars.

"This will make these cars conspicuous so that railroad operating men in train and yard service may promptly identify such cars. Instructions to expedite will be issued by Warren C. Kendall, chairman, Car Service Division.

"The painting of dome 'white' is permissible but not mandatory. The

26

car owner or shipper must stand the cost of painting, and this should be accomplished on loading or unloading racks without delaying the car or necessity of extra switching.

"It is suggested this be accomplished as quickly as possible."

The situation is critical at this time with extreme shortage of equipment for the transportation of liquefied petroleum gas and anhydrous ammonia; therefore, it is requested that you issue special instructions to expedite both loaded and empty movement of all pressure tank cars. I suggest you emphasize switching service at origin, destination, and at intermediate interchange points. Please mail this office five copies of your instructions.

Yours very truly,
Porter L. Howard,
Consultant, Liquid Transport

War-Time Transmission Lines May Carry Gas Permanently

A recommendation that the "Big Inch" and the "Little Big Inch" pipe lines be sold either for the transportation of petroleum and its products or natural gas or a combination of both was submitted to Congress Jan. 3 by War Assets Administration.

WAA announced December 27 that new bids will be asked on the above basis for the pipe lines, constructed during the war at a cost of \$147,000,000 to move oil from Texas to the New York-Philadelphia area. These bids must be made on forms prepared by WAA. They will be received until noon Feb. 8 and publicly opened Feb. 10, 1947.

WAA concluded that national defense requirements can be met regardless of whether the lines are used to carry gas or oil or a combination of both.

When You Install a Tank <u>Do It Right</u>

By ROGER LAUBACH

Assistant General Sales Manager, Propane Gas Equipment Division, Black, Sivalls & Bryson, Inc., Oklahoma City

N the interest of better, safer tank installations by our dealers, we have prepared an outline of good procedure. If followed it will help to bring a high degree of safety to the industry.

- 1. The tank should be well supported. Masonry or concrete blocks 6" high are necessary, and should be placed in firm earth. Wood supports do not comply with State laws and should not be used. The position of the tank should be level to insure perfect gaging of the fuel.
- 2. Every system should be perfectly grounded. A ½" steel pipe should be driven into the ground near the drilled hole in one of the tank supports. To this pipe should be connected a braided battery cable, securely bolted to the ground pipe and the tank log to insure a perfect ground on the tank. The mere fact that the houseline is buried is not sufficient assurance of a perfect ground. During dry weather the moisture in the earth can be below the usual 18" or 24" depth of the houseline.
- 3. The tank should definitely be painted again. In the rush to get tanks installed, many installers

are not painting the tanks. The color should be white or aluminum which will reflect the rays of the sun and keep the vapor pressure low in the tank. If unpainted the relief valves will pop off during hot weather and cause a hazard. The prime coat of paint which is put on by the manufacturer before delivery is put on to give protection against rust, and the second coat is absolutely necessary.

- 4. Alcohol should be added to prevent freezing of the regulator. Even though we take every precaution to assure dealers of dry tanks, elements beyond our control still make the presence of moisture possible. We suggest that when installing the tank fittings (this means every tank installation) that the following practice be adhered to:
- (a) Any regulator will freeze at the orifice even in summer weather if there is moisture in the tank, in the fuel or in the piping, where such moisture can settle on the seat and nozzle at the high pressure side of the regulator. Enough moisture to stick a postage stamp will do it. Therefore, we urge that any assembly be done during dry weather only.
 - (b) Examine the new tanks with

a flashlight before the fittings are installed on the tank. Remove the plugs and gage cover which are installed by us, and examine by looking through one of the holes, with the flashlight aimed through the largest hole to see if the tank is thoroughly dry on the inside. Try wiping a small dry cloth wrapped about a wire around the walls of the tank, if you are not certain.

(c) If the tank is wet, it is your privilege to return the tank to Black, Sivalls & Bryson, Inc., freight prepaid, or proceed to eliminate the moisture by a chemical method, as follows:

Wipe out the moisture or water by using a small dry mop fastened to the end of a wire which should be put through the largest opening in the tank. Merely rock the tank back and forth, wiping up the water in sight. Drying out the mop and repeat until all of the water is removed. Then pour in approximately one or two gallons of alcohol, either wood alcohol or anti-freeze, and roll the tank so that the alcohol will reach all damp walls of the vessel. Wipe this out thoroughly because this water diluted with alcohol. Pour into the tank one pint per 100 gallons water capacity of wood alcohol, and immediately thereafter install the fittings. Be certain the tank valve is shut off tightly, just as you would do on an ICC bottle. The system is then ready for the first load of fuel.

Use Wood Alcohol

If the tank is inspected and found to be perfectly dry, you must reason that the first time propane is pumped into it, the air on top of the tank will compress and condense what moisture is in the air to the side walls up to the top wall of the tank. Therefore, one pint of wood alcohol per 100 gallons of water capacity should still be used.

Use propane gas for testing and not compressed air, unless dry air through a calcium-chloride tank is piped to the intake side of the compressor. When you use propane gas, use only vapors, in case there is a leak in the assembly.

(d) Be sure that only dehydrated propane is used in servicing these systems. Be sure the manufacturer of the gas, or the transporter, guarantees you that the gas is moisture free. The major refineries will dehydrate their fuel before it is commercially sold, and thereby charge more for this added cost to them. The price of the gas is generally higher when additional refining processes have been used to free it of water.

Guard Against Water

- (e) Guard against water in new equipment New storage tanks for bulk storage or new truck tanks will contain water which the manufacturers left in storage or new truck tanks will contain water which the manufacturers left in the tanks either by hydrostatic test or air test of the vessels. Remember that this water will ultimately get to your systems. Guard against it, even to the point of opening all manholes in storage tanks and truck tanks so that they could be manually wiped out. If there are no such manholes, elimination of water by the chemical method described above must be used by parties owning this new and first used equipment. Guard against hose that has been exposed to the weather-even those at the refineries.
- (f) Use every precaution that is possible with your installers to prevent that tiny bit of water which can get to the seat of the regulator and freeze your future customer's system. When water is in the system it

means considerable trouble to get it out.

- 5. How to get water out of the tank. If a pint of wood alcohol per 100 gallons of water capacity will not correct the freezeup, there are several alternate methods to pursue. These are as follows:
- (a) If the system is single stage pressure reduction, and if larger regutors or high pressure regulators for the two stage reduction are not available, the best way to handle this condition is to remove the tank from the premises, and let the gas out of the tank where it can be done safely, and then take it to some manufacturer who has steaming facilities who can steam it out and then dehydrate the tank for you.

Large Regulators Will Help

- (b) Larger regulators, particularly those with large inlet orifices, will help and may solve the situation, providing care is taken from then on. Large regulators cost more, but have the feature of a larger diaphragm and more mechanical lever advantage and hence more pounds of force on the on-and-off action of the plug to the nozzle and will sometimes open the ice sealed seat and allow the regulator to operate. Also the large opening would let a small ice droplet through. A small amount of glycerine at this point would help.
- (c) Two stage pressure reduction is by far the best method to guard against the usual carelessness encountered in the installation of tanks. Have a high pressure regulator set at 15 lbs. on the tank, a low 6-ounce pressure regulator just outside the house, and piping properly installed. This will mean some additional cost, but service calls due to freezeups will

be greatly reduced. This is really the proper arrangement for propane aboveground and belowground installations and has proven itself.

Hundreds of these were installed in 1939-1940 and none were ever known to give trouble. The fact is, only competition forced the distributors to lessen their costs by installing single stage systems later.

Water Can Be Blown Out

With this two-stage principle, the water will collect in the piping between the two regulators which is underground. Provisions can be made to blow out the water after several years accumulation therein. Therefore, only a small amount of alcohol is necessary and the proper place for it is not in the tank, but in this piping between the regulators. It is suggested that installations be made so this feature can be adopted when equipment is available, and thereafter use it in all of your installations.

We would also like to mention that we handle the BB-2937 Automatic Cut-Off Valve which safeguards accidents caused by the escape of gas into a building as a result of temporary interruption of gas flow to the appliance. One of these should be installed ahead of any heater which may be in operation overnight, particularly the radiant heaters installed in living rooms, bedrooms, etc., which are not provided with full automatic pilot control. The cost of these is nominal, and they constitute safety to those who have them on their appliances. We recommend them highly.

Loss of Pump Capacity Due to Inlet Starvation

Fig I—In pumping any LP-Gas fluid, if pressure at pump intake is reduced by suction to below that of supply tank by amounts shown in first column below, pump output will be reduced in percentage of total capacity approximately as indicated by figures in body of chart in accordance with pumping temperatures.

	_		_												
	N-BUTANE	ATURES	30°FAHR				62.5% VAPOR				77% VAPOR				83% VAPOR
		TEMPERATURES	70º FAHR		T A		41.5% VAPOR				59% VAPOR				69% VAPOR
	Z	PUMPING	110°FAHR		ć "i		19.5% VAPOR				32% VAPOR				42% VAPOR
	I SOBUTANE OR AVERAGE BUTANE-PROPANE MIXTURE	TEMPERA TURES	30°FAHR				55% VAPOR				70.5% VAPOR			1	78.5% VAPOR
			70° FAHR		3/11		29% VAPOR		2		45.5% VAPOR				55% VAPOR
		PUMPING	IIOºFAHR				14.596 VAPOR				25.5% VAPOR				34% VAPOR
	ΙĒ	TEMPERATURES	30°FAHR				I4% VAPOR			Annual Control	25% VAPOR				33% VAPOR
	PROPANE		70° FAHR			ANCH.	5.8% VAPOR			de e	10.8% VAPOR				15.2% VAPOR
	PR	PUMPING	110° FAHR	"Quarter"			2.6% VA POR			in and the same	5.2% VAPOR				72% VAPOR
	REDUCTION OF	BELOW TANK	VAPOR PRESSURE	PRESSURE	ONE	POUND	SUPPLY	SUCTION PRESSURE		BELOW	SUP PLY PR ESSURE	SUCTION	THREE	BELOW	SUPPLY PRESSURE
	2 4	- 4											_	-	

PUMP PROBLEMS

Provide Ample Inlet Line Capacity

By R. STANLEY SMITH

Manager, Smith Precision Products Co., South Pasadena, California

N an earlier issue of BUTANE-PROPANE News (July, 1945), we introduced tables to show the ap-

proximate loss of pump capacity which occurs due to the one item of inadequate gravity head to insure a flow of solid ligiud to the pump. Manv friends have since questioned the importance of this factor.



R. STANLEY SMITH

Frequently we hear the statement that with a pressure of 150 lbs. of propane vapor in the tank, it seems entirely unnecessary to be concerned with the few additional feet of gravity head obtainable by keeping the tank level well above the pump inlet level. Others compare the pumping of LP-Gas with the problems involved in pumping gasoline, or even that of pumping oil or water.

They do not appreciate the important fact that in LP-Gas pumping, we are handling a fluid at its boiling point, and that the slight-

est reduction in pressure or increase in temperature will develop a vapor content in the fluid proportional to the degree of heat, or pressure drop. In order to more fully emphasize this point, we are again reproducing, in a more readily visible form, the data presented in the table previously presented.

We believe it is the consideration given to this one major item of inlet line capacity which has helped the most to insure the success of the many very satisfactory installations which have recently been made. On the other hand, it is the total disregard of this consideration which has led to some very unsatisfactory installations, for the failure of which many other explanations have frequently been advanced.

We have had the opportunity of studying a great many plants and tank truck applications, and find great enthusiasm expressed over the excellent and sometimes almost unbelievable output performance of certain of these. These installations are invariably the ones where we find the larger sizes of excess flow valves applied, where plug type valves are used instead

A Very Satisfactory Installation

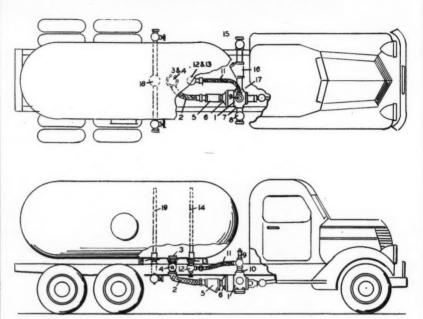


FIG. 2

In the schematic layout above, a 100 GPM pump (1) is shown which is supported as far below the tank level as is practicable. It is connected by a short 3" flexible tubing (2) from the main tank outlet which is provided with a 3" excess flow valve (3) and a 3" plug type valve (4). The strainer (5) is 3" in size and connects directly with the pump intake through the pump end cover (6). Outlet is through port (7), valve (8) and hose line not shown.

The spring-loaded by-pass valve (9) is inserted in the vertical pump outlet port (10) and is connected by flexible tube fitting (11) through valve (12) and check valve (13) inserted in tank vapor outlet, having an internal tube (14) extended vertically within the tank to the vapor area. Direction of fluid flow for discharging load

is from tank through flexible tube (2), strainer (5), pump inlet (6) and pump outlet port (7).

This truck is provided with a reversible power take-off so that the same pump may be used for both loading and unloading. When loading, flow is through left-hand valve (15), strainer (16), pump side inlet port (17), with discharge to tank through pump end cover (6), flexible tube (2), valve (4), and excess flow valve (3).

A separate vapor return connection (18), with internal vapor tube (19), is piped to both sides of the truck to provide for hose connections for vapor pressure equalization in case of pumping in either direction. Filling and discharge rates of 80 to 90 GPM are readily made, and the extreme simplicity of the piping layout can readily be seen.

of globe valves, or where oversize globe valves are installed; where 45° ells have been substituted for 90° fittings, or better, where large radius bends of the welded type have been used; where oversize inlet lines from tank to pump have been applied, along with oversize and free-flow strainers in addition to providing the most direct flow line possible, eliminating all short bends and avoiding reduced flow areas.

Trouble From Small Pipe

Then we have been called to look over other installations where there was considerable dissatisfaction expressed, and in these cases have invariably found small size piping applied, smaller in actual inside area than appears to be the case because of the extra strong type of piping used. We have had to call attention to the extremely narrow and tortuous passageways provided in many standard valves designed for this service, involving many directional changes, along with velocity changes due to abrupt changes of flow areas within a single valve.

These valves seem to have been designed with the one thought of low cost production plus the ability to pass underwriters' pressure test requirements. Such objectives are, of course, important, but should not be the sole considerations when, by the use of such valves, flow capacities may be cut in half, and expensive equipment, such as tank trucks and transports, are required to stand twice as long as necessary during loading and unloading periods.

In addition, and particularly in truck designs, we have often found unnecessary dips and bends as well as opposed streams directed through tee fittings; also tanks with dip tube outlets which have been made up with restricted tube areas within the tanks. These are among the difficult hidden impediments to fast flow.

We have also known of cases where the excess flow valve has been so shrouded by a continuation of the tank outlet collar beyond the valve end as to close off half the otherwise possible flow into the valve.

Other Precautions to Take

The same complaint may be brought against the internal valves which are sometimes used to replace excess flow valves, and which normally show such excellent output capacity. These also are frequently found having the valve head completely shrouded by the tank outlet fitting in such a way as to entirely offset their otherwise fine flow capacity. Such items as these must be guarded against at the time of installation, since correction, or even discovery, is practically impossible at a later time.

All the above is written pertaining to the pump inlet line. A point which we have always made is that the inlet line is the one item which invariably has the most to do with the pump output capacity. This can be understood readily when it is appreciated that there is no other force to bring fluid into the pump other than the gravity head. As we have often re-

A Very Troublesome Installation

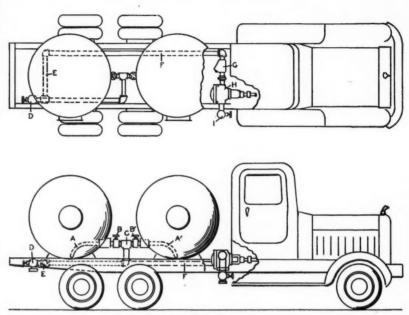


FIG. 3

The layout above is shown merely to indicate defects in a system which was quite expensive to install and yet gave very unsatisfactory results. The first bad item was the dip tube construction whereby the liquid must be raised a foot or more by syphon action. This results in immediate vapor formation when handling any LP-Gas product.

In addition, the dip tubes (A & A¹) were, in themselves, a bottleneck in the suction line due to small size, having a flow area considerably less than the already small size piping $(1\frac{1}{2}z'')$ applied. Then the two valves (B & B¹) were of the globe type with reduced valve area and exceptionally narrow flow passages.

Next, it was intended to attain greater discharge speed by having both tanks opened simultaneously. But when this is done, there are two opposed streams of high velocity fluid meeting head-on in the tee fitting (C). After passing through this,

the stream flows to the rear of the truck where a valve (D) was provided for loading the tanks.

From here the 1½" piping (E) passes across the width of the truck and back on the left-hand side (F) and finally through the strainer (G) on to the pumpintake (H). Passing through the pump, discharge is through valve (I). In addition to the long length of 1½" piping and the two restricted valves, three elbows and two tees and the strainer are involved in the passage to the pump. The pump was operated only in one direction, filling of the tanks being accomplished by an outside stationary pump at the refinery.

The capacity of the truck pump was 60 GPM, but the best attainable discharge flow was approximately 15 GPM. Needless to say, this customer was greatly disappointed, but there was little that could be done to remedy the conditions aside from a total rebuild.

peated, any reduction of pressure in any part of the system to below that in the supply tank, results in the formation of vapor. It is well known that if the pressure above the liquid in the tank is reduced by opening a valve to discharge vapor, instantly the fluid in the tank will start to boil and will continue to do so until the original vapor pressure is reestablished in accordance with the existing temperature.

Gravity Flow Determines Discharge

The same thing will happen in the intake line to the pump when, due to inadequate gravity head pressure, the fluid flow is equal to only a part of the pump displacement capacity. The pump can receive only what liquid does flow to it by gravity, and the balance of the pump capacity must be made up of vapor. This means that the pump discharge in liquid may be reduced far below its displacement capacity, since the pump cannot expel more than is received through the suction line.

The diagram accompanying this article (Fig. 1) gives a visible interpretation of just what this loss in output may be. It is fortunate that the reduction in capacity is much less with 100% propane than with butane, since propane appears to be constantly coming into greater use. The reason for propane being less affected by this pressure reduction is due to its lower boiling point and the consequently higher pressure under which it is normally pumped. The same explanation applies to the lesser loss of capacity found with all three fluids when they are being pumped at the higher temperatures. To many, these figures have appeared to be opposite to what might have been expected, but they show, nevertheless, what does actually happen.

In this article we are showing (Fig. 2) a schematic drawing of a tank truck installation which we consider very good and which has proven exceptional in fast-flow performance. We are also illustrating (Fig. 3) another installation which has proven very unsatisfactory in service. A study of these will, we believe, help to give a better understanding of the importance, in LP-Gas pumping, of the statements which we have frequently expressed in our catalog of literature as well as in our BUTANE-Propane News articles, and which we repeat here as follows:

Butane and propane pumps should always be placed as close as possible to the supply tank. Provide short, direct inlet connections, with the fewest possible bends or obstructions. Place the pump as far below the liquid tank level as may be conveniently done, so as to take advantage of the greatest possible liquid inlet head.

Since butane and propane are handled at their boiling points, suction should not be depended upon to draw the liquid into the pump, because any pressure reduction in the inlet line will result in the formation of a large volume of vapor. Such vapor will displace an equal volume of liquid and reduce the pump capacity to deliver.

FILLER VALVES

A	R-2651	3	IPS	to	31/4	6 P	Acme	Thd.	
-				_					

B R-2690 % IPS to % IPS

B R-2696 1 1/4 IPS to 1 IPS

B R-2693 1 1/4 IPS to 1 1/4 IPS

B R-2694 2 IPS to 1 1/4 IPS

B R-2650 3 IPS to 2 IPS

C R-2652 2 IPS to 1 % 6 P Acme Thd.

C R-2654 1 1/4 IPS to 1 3/4 6 P Acme Thd.

C R-2675EF % IPS to 1 % 5 P Acme Thd.

D R-2697BC 11/4 IPS to 11/4 6 P Acme Thd.

D R-2697EF 11/4 IPS to 13/4 6 P Acme Thd.

D R-2691 1 1/4 IPS to 1 3/4 6 P Acme Thd.

D R-2692EF 1 1/4 IPS to 1 1/4 6 P Acme Thd.

F R-2680 % IPS to 1 1/4 5 P Acme Thd.

EVCESS FLOW CHECK VALVES

1 1/4 IPS to 1 3/4 6 P Acme Thd.

EXCESS FLOW CHECK VALVES

E R-2695A 1 1/4 IPS to 3/4 IPS

F R-2697

E R-2695 1 1/4 IPS to 1 IPS

E R-2795 11/4 IPS to 11/4 IPS

E R-2794 2 IPS to 1 1/4 IPS

E R-2796 % IPS to % IPS

* R-2686 3 IPS to 3 M or 2 F

* R-2687 2 IPS to 2 M or 1 1/4 F

* R-2688 21/2 IPS to 21/2 M or 11/2 F

* R-2689 3 IPS to 3 M or 2 F

VAPOR RETURN VALVES

C R-2750EF % IPS to 1 ¼ 5 P Acme Thd.

C R-2752EF 11/4 IPS to 13/4 6 P Acme Thd.

C R-2754EF 2 IPS to 1 % 6 P Acme Thd.

F R-2790 1 1/4 IPS to 1 3/4 6 P Acme Ind.

F R-2797 % IPS to 1 1/4 5 P Acme Thd.

G R-2789EF 34 IPS to 1 1/4 5 P Acme Thd.

G R-2797EF % IPS to 1 % 5 P Acme Thd.



A

R-2651 — A Filler Valve with double check feature, resilient seat and metal to metal check for 3" tank spud to 3¾" 6 P Acme thread, such as bulk storage tanks and other large tanks.



B

R-2650 Check Valve (3" IPS) shown is typical — All models are metal to metal seat, back pressure check valves — sizes from 34" to 3" IPS. Light weight spring for low differential in pumping liquids.

Line of Butane-Propane VALVES

LOOK to RONEY!

R-2654 Combination Filler Valve (11/4" IPS) shown is typical in exterior construction for both filler and vapor return valves listed under C. Filler valves have a resilient seat and metal to metal check. Combination vapor return valves have resilient seat check and excess flow check. A feature of all combination valves is a replaceable resilient seat under tank pressure.

R-2697EF and R-2697BC Combination Filler Valves (11/4" IPS) shown. Exterior construction is same. BC valve is equipped with supplementary metal to metal back pressure check. EF valve has built-in excess flow check, R-2691 and R-2692EF serve the same functions but permit replacement of upper seat under pressure.



R-2796 Excess Flow Check Valve 13/4" IPS) shown is typical. A variety of sizes are manufactured for tank spud or gas lines. Also used as vapor returns or equalizing connections in combination valves.



container.

R-2797 Vapor Return Valve 13/4" IPS) shown - Exterior construction same on filler valves and vapor return valves, furthermore both are equipped with resilient seat back pressure checks. However, vapor return valves have a provision for holding check valve open when filling the



R-2797EF Vapor Return Valve (3/4" IPS) shown - This valve is equipped with resilient seat back pressure check and a built-in excess flow check valve, R-2789EF Vapor Return has same features but is a new design in which upper seat is replaceable under pressure.

L.C. RONEY INC.

DIVID + INCIEWOOD CALLE

Gas and Appliances Crowd Out General Lines of Delaware Dealers

THERE are many dealers in the liquefied petroleum gas industry today who were originally engaged in other lines of business and who ultimately found that what was once a sideline—handling gas and appliances—became their leader.

An excellent illustration of the evolution of grocery and hardware merchants into successful gas distributors is to be found in the experiences of Collins & Ryan whose association goes back to 1911 in Millsboro, Del.

Originally, Edward B. Collins and Edwin C. Ryan started out with a grocery and hardware store. Farming implements and furniture were added later. In a few years, a tomato factory was purchased and the canning business was added to the others. In 1927 livestock was added, along with the purchase of mules

and cows in carload lots for sale with the farming implements to farmers. In 1928, appliances were added to their furniture business.

In 1934 every part of the business was eliminated to concentrate upon the service and sales of appliances.

Joseph E. Collins tells the story from here on:

Tells Own Story

"We entered the complete appliance business in 1935, this also being the beginning of our experience in the gas business. At first, we gave very little encouragement to prospective gas range buyers because we had been such a large retailer of kerosene stoves and ranges that we actually got a kickback each year of several thousand dollars from the manufacturer. For that reason, at first, gas range sales



The 30,000-gal. bulk plant of Collins & Ryan. Cylinder filling, repairing, repairing and all shop work handled at this location.

for instant action:



BASD... poised for swift shutoff!

Tense! Alert! The leopard waits...taut muscles strained for that all-important instant of swift, sure action. Balanced! Poised! The BASO waits steel muscles under perfect thermo-electric control, for its instant of immediate need...snaps off gas flow in event of pilot flame failure. Patented BASO design permits safe, simple relighting.

FOR RELIABLE, AUTOMATIC GAS SHUTOFF...SPECIFY

BASO...The Automatic Pilot

Send for Bulletin—SB 300—"Application of BASO'S"

ANY . MILWAUVER & WICCONS



Office and showroom of Collins & Ryan, Millsboro, Del.

competed with our yearly kickback. But, like conditions of our country, changes slowly began.

"The first few gas ranges we sold were furnished by a gas company which supplied us with the gas ranges and the customer's requirements of gas. Soon we tied up with another gas distributor, purchased our gas ranges directly from the manufacturer and then supplied the customer with gas furnished by the distributor.

"Our sales on radios, washers, and refrigerators continued up and up. This required so much attention that the gas business actually received too little until the war stopped the sales of all appliances.

However, the last year of business before the war we added 'metered gas service' to our former method of selling by the 'tank system.' This gave our customers a choice between metered or tank service. It wasn't until about the middle of the war before we definitely decided to major in the gas business. War conditions and priorities held us up terribly.

"We contracted with the Solgas Division of the Sun Oil Co. to furnish our gas and the engineering and installment of all equipment.

"To our knowledge, the plant is the largest in this section of the country. The plant is large enough and so arranged to accommodate

Mutual

PORTABLE FURNACES

Find Many Jobs in Shop or Field



The No. 1A Furnace was designed for use in the industrial, agricultural and commercial fields where heat is needed fast and on the spot. It is ideal for such uses as water boilers, tar kettles, grease vats, paint vats, dryers of all kinds. It is adaptable, easy to transport, and use. Direct gas cylinder pressure or regulated pressure may be used. Old customers—and new ones—will find many uses for this versatile burner.

No. IA Furnace



4-BURNER MANIFOLD Available as Accessory

The same as that used in No. 1A Furnace, this 4-Burner Manifold can be adapted to scores of heating jobs found in general field and shop work. Good for jobs where fast, intense heat is desired it can be used in small or large space. Approx. 2350 degrees may be developed by each tube.

For Further Information on this equipment, as well as Mutual's full line of torches and burners, write for complete, illustrated catalog.

Mutual LIQUID GAS EQUIPMENT CO., Inc. 3600 West Imperial Highway, Inglewood, Calif.

the wholesaling of propane gas to other dealers that might be located

within operating distance.

"The tank has a capacity of 30,000 gallons. The pump is made by Dean, the compressor by Brunner, and both are of 5 hp. size. There are four sets of Howe platform scales, including ounce indicators, and our operating filling time average is the filling of one 100-pound cylinder per minute.

"The plant also includes a parts and service department for each type appliance used in a home whether it be gas or electric. All departments are equipped to do everything necessary in the repairing or refinishing of any appliance. We also have our own garage and truck mechanics, electricians, carpenters

and plumbers.

"Our main office employs seven people and is located in the retail store. A direct telephone line operates from our main office to every branch of the business. At present, we operate 10 trucks and two automobiles.

"Gas appliances and equipment are stocked and furnished to our

gas dealers at wholesale.

"Since we entered the business back in 1935, we have always made regular monthly trips to each customer's home, regardless of the system they use, checking their supply and replenishing their gas, including billing and collecting all at the same call.

"We have a friendly agreement with our largest competitor, whereby, neither of us will take the other's customer unless permission is obtained. This we are proud of and our policy is to not take a customer from any competitive gas company unless they so desire.

"We trust the business will continue to be clean and friendly between us all. Like others in the same business, we, too, hope conditions of our country will soon improve so merchandise will once more be available in quantity."

Are You on Mailing List For LP-Gas Data Book?

A pamphlet, "Liquefied Petroleum Gas Data," was recently published by the McNamar Boiler & Tank Co., Tulsa, Okla. It is the first of a series which will be printed by this company for the dissemination of important facts concerning the liquefied petroleum gas industry for dealers.

The first issue is devoted primarily to a discussion of heating and heat problems, including the measurement of heat and the origin of gases.

Also included are recommendations for the care of LP-Gas systems and a pertinent table of figures commonly used by dealers.

Anyone desiring to be put on the mailing list for these pamphlets should address the McNamar Boiler & Tank Co., P. O. Box 868, Tulsa, Okla.

New Company Will Distribute Fuel in Central Nebraska

The Central Gas Co., Central City, Neb., new distributors of LP-Gas in bulk and in cylinders, is now ready for full operation throughout central Nebraska. A complete line of appliances and equipment is warehoused in the Central City plant.

Officers of the organization are Lawrence R. Forsythe, Jr., president; Paul J. Slegel, vice president and plant manager, and H. K. Kettelhut,

secretary.



30,000 gallon-capacity propane storage tanks, built by A.C.F. for the American Brass Company, Torrington, Conn.

For the long-life, trouble-free storage of propane or butane-propane mixtures you can buy none better than an Q.C.f. fusion-welded tank. The same skilled workmanship that has gone into more than 50 years of railroad tank car building...careful inspection and testing...assures an added measure of durability and lading protection in all Q.C.f. tanks.

High-pressure storage tanks are available in all capacities up to 30,000 gallons to suit your requirements.

AMERICAN CAR AND FOUNDRY COMPANY

New York • Chicago • St. Louis • Cleveland Washington • Philadelphia • Pittsburgh San Francisco



STORAGE TANKS

Small Town Store Keeper Makes Big Time Success Selling Butane

CY CARNEY, owner of the Cy Carney Appliance Co. of Fayetteville, Ark., takes great pride in

his business. It is a strong, comfortable busin e ss. created in a few short years, out of experience and a desire to take part in what is today one of the nation's fastest growing industries. He is owner of four stores in Arkansas and one in Missouri.



CY CARNEY

In June, 1919, he opened a store in his home town of Rudy, Ark.—a general mercantile business, catering to farm trade, handling produce, selling feed, shoes, dry goods, groceries, and hardware. He was also postmaster.

This was the kind of business it seemed to him he would like to follow, after having served in the Army in World War I—and this kind of business seemed to offer the surest reward for the assiduous attention he was trained and eager to give.

This business has had a steady growth through the years and is still one of his valuable properties. It was there that he learned of the need of the rural people, and their strong interest in obtaining for themselves the important conveniences and luxuries enjoyed by their city cousins.

Mr. Carney, learning of a new product called butane gas, became interested, and in order to know more about it, decided to try it in his home first, and by purchasing through a local dealer he became a user of butane gas. He bought a 500 gallon tank, and through this trial became acquainted with the advantages of butane gas for rural people. Mr. Carney was really convinced and wanted to spread the good news to all who lived in places where they could not have natural gas.

While he purchased various kinds of stores, such as grocery, hardware, and others, he could not be satisfied with these, for it was not the field in which he wished to sell—he wanted to sell LP-Gas systems!

In 1938, in keeping with his policy of expansion, Mr. Carney opened appliance stores in Fayetteville and Rogers, Ark. Both stores met with success and are still in operation. These stores meet an important need in their territories, and have a lot of installations on brooders, as Washington and Ben-

THINGS NECESSARY FOR DEALER SUCCESS. 1 A DEPENDABLE AND READY A DEPENDABLE AND READ I SUPPLY OF BUTANE-PROPANE TANKS. 2 TANKS THAT KEEP YOUR CUSTOMERS SATISFIED. You Get Both with ECONOMY TANKS BY BANKS DALLAS TANK COMPANY, INC. P. O. BOX 5387 . RIVERSIDE 5001 . DALLAS, TEX.



Display room and office of Cy Carney Appliance Co., Fayetteville, Ark.

ton counties are large producers of poultry, their sales being over \$10,000,000 annually.

A great portion of this poultry is brooded by LP-Gas installations, and the continued operation of the many stores, despite limitations imposed by war-time conditions, is a testimony to the vision and integrity of their founder.

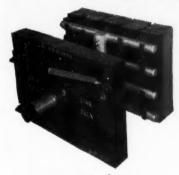
Leading articles in the Carney appliance stores are Servel refrigerators, Tappan gas ranges, Temco circulating heaters, Coleman floor furnaces, Phelps air conditioners, Wood brooders, butane and propane systems, water heaters, Maytag washers, and Fairbanks-Morse water systems and small appliances.

Mr. Carney has two storage tanks, butane and propane, located at Fayetteville, with a capacity of 25,000 gallons; one storage tank at Rogers with a capacity of 16,000 gallons; one at Mountainburg, Ark., of 12,500 gallons, and one at Lebanon, Mo., of 15,000 gallons. Six tank trucks make prompt deliveries to homes and business houses in Washington, Benton, Madison, and Crawford counties, instead of, as at the beginning of the deliveries of LP-Gas, making the trip to Oklahoma refineries in the winter night and day to keep the users supplied with fuel. Now close contact to all users is maintained and the trucks are routed out on regular runs.

"Courtesy" and "service" are Mr. Carney's watchwords and good quality merchandise has built up an ever-widening circle of satisfied customers. The six trucks serve over 1200 such customers. There are 36 men employed. Some have been with him since he first opened the appliance store; several men

John Zink's CONVERSION BURNERS

for LP GASES



SERIES "R" BURNER

ZINK STAR BURNER

Refractory type gas burner—ideal for installing in boilers with very low draft and small combustion space.

Low pressure, radiating armed spider gas burner, applicable to heating or power boilers. Walled type.



NO. SC 300 FURNACE BURNER

Shown with automatic controls—luminous gas flame type. Applicable to 98% of all domestic furnaces.

These burners operate as efficiently on LP Gases as on natural or manufactured gas.

Write for Literature

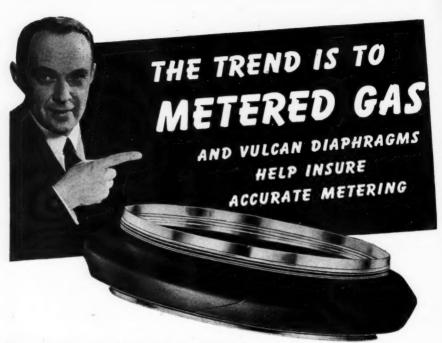
JOHN ZINK COMPANY

4401 South Peoria

New York

Salt Lake City Los Angeles

Tuisa I, Oklahoma os Angeles Houston



Meters and regulators for LP gas need the special characteristics which only VULCAN diaphragms afford.

Butane, propane and combinations of these gases tend to dry out and cause brittleness of leather diaphragms. This adversely affects accurate operation and causes costly replacement problems.

VULCAN diaphragms are scientifically controlled manufactured products. These nonleather diaphragms are molded to required shape. They remain soft and flexible for years, yet they REQUIRE NO OILING. For meters, regulators and governors, insist on VULCAN diaphragms.



VULCAN

PROOFING COMPANY

FIRST AVENUE & 58th STREET . BROOKLYN 20. NEW YORK

were in World War II and served overseas, but came back to be in the business.

A. A. Welborn is one of the older members and is manager of the Rogers store. Lester Moon served overseas in World War II and has also been with Mr. Carney a long time, being one of the key men of the Cy Carney Appliance Co. Recently Mr. Moon conducted a school of instruction for employes on installation and adjustment of stoves and water heaters, and service problems. This school was held at night in the showroom of the Fayetteville store and employes from other stores attended.

Mr. Carney is one of the charter members of the Arkansas Butane Dealers Association, organized in 1940. He has long taken an interest in farming and growing livestock. He owns several farms in Crawford county; has a large peach orchard, two grape vineyards, grows water-melons, cantaloupes, and vegetables for the market and raises white faced Hereford cattle. Farming is a hobby with him.

Mr. Carney's family consists of his wife and two children—Cy Carney, Jr., and Kathryn Lucille—both grown, married and active in the business.

One of the current problems is to balance the gas load throughout the year. However, customers are gradually buying larger systems so as to have greater reserve supplies of fuel during peak demand periods. Canneries and sawmills are installing LP-Gas systems, too, and thus helping to balance the load.

F. J. Borelli Heads Oklahoma Group

NEW officers and directors of the Oklahoma Liquefied Petroleum Gas Association were elected for 1947 at a recent meeting in Oklahoma City.

Francis J. Borelli, Borelli Butane, Inc., Okarche, was named president to succeed Carl Ticer, Ticer Butane Co., Woodward. Dewey Wood, Dewey Wood Butane Co., Ardmore, was elected first vice president and Charles Monroe, Northern Oklahoma Butane Co., Perry, second vice president. Fred L. Yates, Oklahoma City, continues as executive secretary.

New members of the board of directors include: R. L. Epple, Tecumseh; J. E. Jones, Pauls Valley, and J. V. Stewart, Medford, and Charles Monroe.

Holdover directors are: Lewis Hughes, Oklahoma City; Claude Berry, Tahlequah; Dewey Wood; C. O. Whisnand, Lawton; B. C. Truitt, Carnegie; Howard C. Nash, Guymon, and Carl Ticer, as retiring president. Mr. Ticer also is chairman of the legislative committee.

New Publication Issued By Missouri Association

The first issue of "Mo. LP Gas," the official magazine of the Missouri Liquefied Petroleum Gas Association, was published in December.

Editor of the magazine is Robert W. Hadlick, executive secretary. Other officers of the association are: K. H. Dickson, president, L. D. Beckett, 1st vice president, and J. E. Moore, Jr., treasurer.

This magazine will be published monthly and will contain both local news and national news of the LP-Gas industry.

COMMERCIAL AND INDUSTRIAL APPLICATIONS

Turkey Incubating With Propane

By C. C. TURNER

New England Editor
Butane-Propane News

CHAPTER 30

HEN Chapters 7, 8, 9, and 10 pertaining to the poultry business appeared in this series in the spring of 1945 much interest was expressed by readers in the adaption of incubators to liquefied petroleum gas operation. There was not any doubt that we had superior results to offer poultry men at minimum cost in the brooding field, but much was left to be said about incubating.

The reason was obvious. Manufacturers had become discouraged in attempting to sell gas incubators because of the lassitude of gas distributors, and they had consequently discontinued making them.

Small oil burning incubators were still available, but emphasis was being placed on electrically operated units together with some large units that operated by the circulation of hot water from coal fired water heaters.

Now, electric units are all very well if you are located in a community where the supply of electric energy is unfailing, but such dependability does not exist in the northern part of the United States which is bedevilled with sleet and wind storms at the very time of year when incubating is at its peak.

I know of at least two instances in which the power companies have been very well pleased to settle handsomely with poultry raisers because of losses due to current failure during the incubating season. I also know of one large operator who is stuck with large electric incubating units on his hands. and he has gone to the expense of installing a \$3000 auxiliary power plant to guard against the possibility of current failure. This fellow could not have afforded to do this if poultry raising had been a means of livelihood or anything but a hobby with him.

Then again, right here within 12 miles of Portland, is one of our gas dealers who maintains three heavy duty portable electric power plants for renting out when current does fail. His best customers are poultry men with electric incubating equipment, and how he does tuck the tariff to them when they need his help! He has converted a lot of electric incubating equipment to propane operation in this way.

At the time that these mentioned chapters appeared I could not be too enthusiastic over gas incubat-



SALES. SAFETY... SATISFACTIO

The precision - made High - Crown Burner and the famous Dearborn cabinet, cooled by the air-stream drawn through the patented Dearborn chassis, combine to give your customers a new conception of LPG efficiency and comfort.

Check the "sellable" features of the vented and unvented Dearborns. Check them against any other heaters on the market-and you'll see why more and more dealers are featuring Dearborn!

THE WORLD'S FINEST, SAFEST LPG HEATERS!



THE DEARBORN HIGH-CROWN BURNER

- Beveled Crown
- Raised Ports Long Venturi Large Air Bell
- Interior Diverters

- Top-Quality Valves Rigid Mounting Large Interior Area

No Flashback * Complete Combustion



Model DRC25

1700 WEST COMMERCE

DALLAS, TEXAS

LOS ANGELES . CHICAGO ing, and I was not in a position to give BUTANE-PROPANE News readers too much information on the subject. Our own company had experimented some along these lines and had a few small units in operation, but we had experimented with the smaller incubators along the line of direct circulation of the products of combustion through the incubators.

Our chief trouble was with excessive condensation. A certain amount of humidity is necessary when incubating, but we were literally drowning many of the unhatched chicks. By the time that we had the direct circulation method perfected by installing de-humidifying equipment we had built the sale price up beyond the pocket-books of the small operators who would use this type of equipment.

Trend Was Wrong Before

Then again the trend among poultry raisers was to do away with incubating, buy so-called day-old chicks or poults from large specialists in incubating and confine their raising activities to brooding. The market was not particularly inviting because of the small ratio of the gas load involved to the cost of small gas-fired incubating equipment and its installation, so we abandoned the project.

With the large operators, however, the story was entirely different, and the demand for a more dependable source of energy for them was incessant. Coal was not satisfactory, even when the method of heat transfer was through hot water, for while some degree of thermostatic control was possible through automatically controlled dampers, the ultimate control was through the opening of "flappers" in the incubators to allow some of the excess heat to escape, as well as the use of by-passing dampers to deflect heat from the water heating medium. The result was a combersome contraption, subject to vagaries and limitations of the human equation.

The story with oil was much the same, plus a record of serious fires caused and numerous cases of smudging up the premises. The seriousness of such smudges can well be judged when it is considered that many poultrymen have large incubators installed in the basements of their homes where the temperature is conducive not only to reduced incubating fuel costs but to the welfare of the chicks or poults when they are removed from the incubators.

To veteran turkey raisers in North Berwick, Maine, should go much of the credit for making gas incubating a success. I speak of the Ridlon Turkey Farm in that town.

The three Ridlons, father and two sons, are old hands at the turkey raising business, and much that goes for the latest in turkey raising and marketing, such as halving heavy birds for easier selling, was old stuff to them back as far as 1935. W. A. Ridlon spoke of this to me with a smile when he mentioned the thousands of dollars that one of the chain stores has spent upon this type of turkey selling during the past year, offering it to the public as an innovation!

Incidentally, the Ridlons happen to be "Fuelite" dealers, and they,

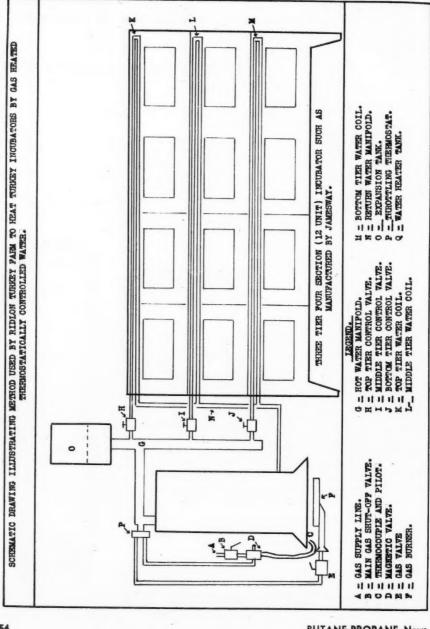


UNITED STATES HEATER CO.

133 EAST PALMER AVENUE . COMPTON. CALIFORNIA

d

a



This booklet identifies ranges equipped with the HARPER CENTER





A STOCK QUESTION being asked by Amore and more women when they set out to buy a new gas range is, "Has it got the Harper Center Simmer Burner?" That's the cue for your salesman to produce the booklet shown here, which is put in every Harper equipped range when it leaves the factory.

SIMMER BURNER

Our consumer advertising is telling prospective range buyers to look for this identifying booklet. It also points out that the famous Harper "2 burners in 1" Center Simmer Burner saves up to 39% on gas, keeps kitchens up to 9 degrees cooler, saves hours of kitchen pot-watching weekly, and has many other advantages possessed by no other top-burner.

To trade-up your customers to a higher priced range, demonstrate these advantages. We offer you a special FREE booklet, "How to Sell More Gas Ranges," which contains a series of quick, convincing floor demonstrations planned to dramatise the advantages of the modern gas range. Send for copies for your salesmen. Harper-Wyman Company, 8563 Vincennes Avenue, Chicago 20, III.



FIVE MAGAZINES THAT INFLUENCE GAS RANGE BUYERS

Ladies' Home Journal . American Home Better Homes & Gardens

McCall's Woman's Home Companion

These leading national magazines have a combined monthly readership of more than 121,500,000 women—families in the upper income brackets—housewives who want and can afford to buy deluxe gas ranges. Take advantage of the Harper Center Simmer Burner advertising in these magazines . . . demonstrate and talk the advantages of Harper top burners.



The Harper Center Simmer Burner operates on the unique principle of '2 burners in 1"... o STARTING BURNER for frying and to start foods boiling, plus a small, economical COOKING BURNER, to maintain the cooking... both controlled by the same handle. It is subject to finer gradations of low heats - greater control and economy—than any other top burner made.

HARPER CENTER SIMMER BURNER

"... Holds the Lines for Gas"



in turn, are indebted to "Ted" Stott, Pyrofax distributor in Wells, Maine, as well as some of the Pyrofax engineers for ideas in perfecting the gas end of incubating.

Friendly Competition Practised

It just goes to show you that competitors can be and are "friendly enemies" up in this neck of the woods. It is not uncommon to find the engineers of one gas company working along with those of another company on the same job in the interest of scientific development. The orthodox gas distributor in New England never hesitates to call upon his competitor for assistance if he is in a jam, and he gets it.

The Ridlon method of incubator conversion is not unlike one suggested in this series on page 60 of the February, 1945, issue of BUTANE-PROPANE News except that to that method the Ridlons have added several improvements.

As a photograph of the Ridlon equipment would not show details of control I have made a schematic drawing of their system. Tank "Q" is of approximately 20 gallons capacity, beneath which ring burner "F" is placed. The size of this burner depends upon the location of the incubator (whether in a heated incubator room or not) and the size of the incubating unit. For a unit such as described, a maximum burner input of 40,000 Btu is sufficient if the unit is in a heated room. This is based upon a system holding 60 gallons of water, a room temperature of 68°F, and a maximum water temperature of 120° F., an allowance of 23% for efficiency and a factor of safety of 30%.

Thermostat "P" is assembled into the outgoing or hot water manifold and is ordinarily set at 120°F. Valves "H", "I", and "J" act as adjustable choke valves controlling the flow of hot water to coils "K", "L", and "M", respectively. Coils "K", "L", and "M" pitch back toward the hot water and return manifolds ("G" and "N"). Note that the coils are above the egg trays in the various tiers.

Heat Works Upward

The purpose of the choke valves is obvious, for in spite of insulation between the tiers, each tier above the bottom one benefits from heat dissipated from the tier beneath it. Then again, hot water rising to the highest point would circulate much more rapidly through coil "K" than through either coil "L" or "M", and likewise faster through coil "L" than coil "M", thereby causing uneven temperatures.

The number of eggs being incubated in each tier has a bearing upon the heat required, and this is adjusted to 102°F. in each tier at the beginning of incubating. During the last four days this is reduced to approximately 99°F. It is during these last four days that most careful attention must be given to seeing that the eggs are frequently "doused" with water. This is why no automatic humidifying device has yet been devised that is satisfactory for turkey incubating.

The Ridlons tell me that the turkey poults have a predilection for

AUTOMATICALLY YOURS



AUTOMATICALLY YOURS!

REFRESHING NEW DESIGNS



BRILLIANT NEW

ROPER

GAS RANGES FOR 1947

FEATURING

JEWELS OF

COOKING PERFORMANCE



AUTOMATICALLY YOURS!

UNEXCELLED PERFORMANCE



AUTOMATICALLY YOURS!

EXTRA CONSUMER APPEAL



If you have not yet received the 1947 Roper Catalogs and complete promotional plans, write us about them today. Here is a top line of merchandise, backed by more than 60 years of manufacturing "know how".

GEO. D. ROPER CORPORATION ROCKFORD, ILLINOIS Offices in Principal Distribution Centers

BUILT ESPECIALLY FOR LIQUEFIED PETROLEUM GASES

Table 1. Cost of Incubating With Propane on Basis of 0.143 Pounds of Propane Required for Each Egg Incubated.

If the cost of propane is cents per. pound	The cost in cents per egg incubated would be	If the cost of propane is cents per pound	The cost in cents per egg incubated would be
12	1.72	7.5	1.07
11.5	1.65	7.0	1.00
11.0	1.57	6.5	0.93
10.5	1.50	6.0	0.86
10.0	1.43	5.5	0.79
9.5	1.36	5.0	0.72
9.0	1.29	4.5	0.65
8.5	1.22	4.0	0.58
8.0	1.15	3.5	0.50

suicide. Let the shell be a little too dry or hard and they will take but three or four picks at it and then die within the shell.

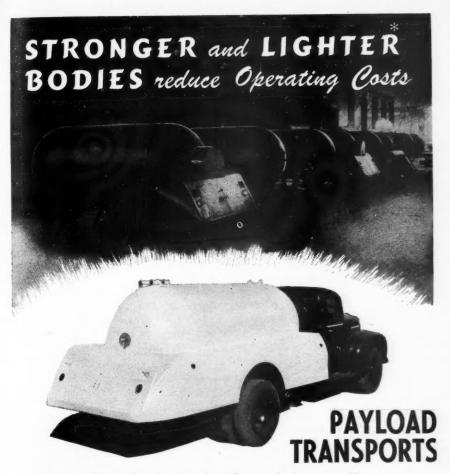
The Ridlons have kept very careful records of turkey incubating with propane gas over a period of five years and here are some of the things they say about it:

At a price of 9c per pound for propane the actual fuel cost is approximately 30% higher than with kerosene, but labor costs are at least 90% less, and the factors of safety and dependability in comparison with coal, electricity, or oil cannot be measured in dollars and cents. You could not persuade them at any advantage in fuel cost to change to any other fuel.

What Is the Actual Cost Per Poult of Turkey Incubating? This depends upon a number of factors such as incubator location, temperatures, efficiency of application, but based upon the experience of the Ridlons we can arrive at an approximate cost. Their incubating equipment is located in a cellar, the temperature of which is approximately 68°F. The capacity of their incubating equipment is 2100 eggs. The incubating period is four weeks. Gas consumption amounts to 100 pounds every 10 days, or 300 pounds for each incubating.

On this basis, the gas consumption is but 0.143 pounds of propane per egg incubated. Table 1 is ample proof that if the cost of propane is anywhere near in line, the incubating of turkey eggs can be done more cheaply than with any other fuel. This also goes for poultry with its shorter period of incubation.

Comparative Hatching Results in Relation to Other Fuels. From any facts at hand it is impossible to arrive at any empirical percentages of hatchings due entirely to the fuel used, for there are too many variables which enter into this to determine such data with any exactitude. Take the example of one shipment of 2200 eggs to the Rid-



"Handle the Load with Loads to spare."

· LIGHTER IN WEIGHT

- Safe, Secure ASME Construction
- Modern, Advanced Design
- National Fire Board Inspection
- Readily Mounted on Any Wheelbase Chassis

Write for Pamphlet Giving Further Information

SOUTHLAND STEEL CO. INC.

5219 MAPLE AVENUE

DALLAS, TEXAS

FEBRUARY - 1947

59

lons, 1400 of which were found to be infertile. Eggs may be chilled or kept too long. Electrical storms are known to have an effect upon

the hatchability of eggs.

There are, however, certain definite factors which would appear to be in favor of gas incubating. First is the matter of evenly controlled temperatures in comparison with other methods of incubating. Next, the influence of coal gas or oil fumes on hatched chickens or poults seems to have an effect. Third, the dependability of gas as a fuel, and practical elimination of the human equation is certainly in favor of gas incubating.

We up here in New England are becoming decidedly in favor of it. Already many conversions of large incubating units have been made. This spring promises to see many more such conversions, and again the liquefied petroleum gases bid to drive electricity from an artificially created stronghold in the field of heat application for which it is not scientifically, economically, or practically adapted. It behooves LP-Gas operators to review Chapters 7, 8, 9, and 10 appearing in the February through May, 1945, issues of BUTANE-PROPANE News.

Hen and turkey eggs totaling 3,693,549,000 will be incubated in the United States this spring! This could mean the sale of 528,177,507 pounds of propane for incubating, alone, if we could obtain the entire load. Many operators have already started on their seasonal operations but it is not too late to capture a goodly part of it at this late date.

Shall we allow this to be a field for other fuels when we can serve the poultry and turkey industries in a manner that can be mutually pleasant and profitable?



This is the 6570-gallon propane storage tank and the 1186-gallon propane delivery truck of the McMinnville (Ore.) Gas Co., owned by J. J. Buller.

st. -IN POPULARITY



Garland Restaurant Range No. 82



Garland Restaurant Range No. 84



Garland Restaurant Range No. 86



One reason is the exceptional speed you get in a Garland Restaurant Range. Another reason is its wide flexibility of cooking heats. Still another is its proved economy. And still another is its long list of convenience features.

All these benefits can mean better cooked food . . . lower fuel cost . . . greater employee efficiency . . . and a lower cost per meal! Always—it's the considered judgment of customers who put the leader in first place. Be guided by those thousands of customers who have chosen Garland. Available for use with either butane or protane gas.

GARLAND

THE TREND IS TO GAS

COMMERCIAL COOKING

HEAVY DUTY RANGES . RESTAURANT RANGES . BROILERS . DEEP FAT FRYERS . TOASTERS ROASTING OVENS . GRIDDLES . ALL TYPES OF COMMERCIAL COOKING EQUIPMENT

Products of Detroit-Michigan Stove Co., Detroit 31, Michigan

Illinois Dealer Bulk Plant Designed for Speed and Safety

By GLENN REYNOLDS

Manager, Bulk Storage and Truck Tank Division Southern Gas & Equipment Co., Tulsa, Okla.

THE recent installation of a complete 18,000-gallon propane bulk plant, transfer, and cylinder-filling station for the Tate Heating Co., Morris, Ill., may have established a record for speed and efficiency, particularly in the installation of the motors, pumps, piping, valves and fittings necessary to plant operation, according to LP-Gas design and construction engineers.

At any rate, it constituted a refreshing achievement in these days of work-stoppages and slow downs, as well as increasing and improving service facilities of one of the most rapidly growing distributors in the Middle West.

The new bulk storage plant was furnished, complete with all piping prefabricated, through Southern Gas & Equipment Co., Tulsa, Okla., and equipped with Corken pumps for transfer, loading and cylinder-filling.

As will be noted by the accompanying picture and ground plan of the plant, the arrangement of the storage tank (a) with relation to the railroad (b) and the cylinder-filling house, storage and truck tank filling dock (c), is compact and efficient. There is not to exceed 20 feet of space be-

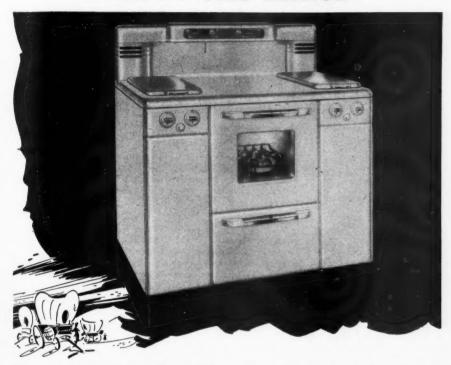


The 18,000-gal, bulk plant and tank trucks of Tate Heating Co., Morris, Ill.

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THE LPGAS RANGE



When you show a prospect a Tappan L P gas range you have back of you more than 66 years successful range building. And you offer your customer a range especially designed and built for the use of L P gas.

Tappan will give her odorless, quick cooking. It will give her a range that is easy to care for, easy to keep clean . . . one that is modern in appearance . . . has automatic

features that will give her new freedom from constant watching and stove tending.

Because you'll have all the right answers in the Tappan you'll make your sale quickly, and you'll have a happy, satisfied customer.

Tappan's L P Sales Maker is a sales help especially written to give you facts and figures on the advantages of using clean, care-free Tappan gas ranges. It's a sure-fire sales closer—it's yours for the asking.

THE TAPPAN
MANSFIELD, ONIO



STOVE COMPANY

The World's Largest Exclusive Manufacturer of Pressure Control Equipment

Nearly three-quarters of a century of experience and "know how" has been devoted to the development of Fisher Butane-Propane gas regulators. The Fisher organization, starting with a modest beginning in 1881, has steadily contributed to the progress of virtually every major industry.

The first really successful bottled gas regulator was made by Fisher nearly 20 years ago, and since then hundreds of thousands of constantly improved regulators have moved from this modern factory into the Liquefied Petroleum Gas industry throughout the world.

Every Fisher regulator is engineered with years of background experience, and produced by our organization of nearly one thousand skilled craftsmen.

For the best and always the latest in design look to Fisher—the world's largest exclusive manufacturer of pressure control equipment.

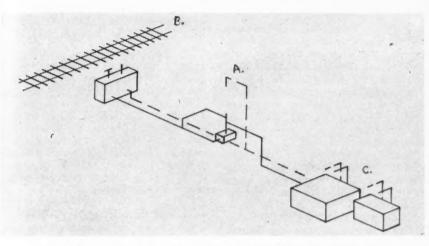
FISHER GOVERNOR COMPANY

992 Fisher Building Marshalltown, Iowa

Eastern Office:

Western Office:

212 E. State St., Westport, Conn. 2334 E. 8th St., Los Angeles 21, Cal.



Ground plan of the bulk and filling plant of Tate Heating Co., Morris, Ill.

tween the railroad and the storage tank, and a similar distance between the latter and the cylinder-filling house, etc. This arrangement not only provides for a minimum of straightline piping, avoiding occurrence of abrupt corners or turns which would slow down the flow of propane, but facilitates the conduct of several operations such as emptying a tank car, filling a truck tank and filling cylinders at the same time.

The pumping units, together with motors and fittings, consist of:

One 1½ hp cylinder-filling unit, composed of a 1¼" suction by 1" discharge bronze-fitted, double ball-bearing, turbine type pump, especially designed and fitted for propane, and capable of filling a 100 lb. cylinder every 2½ minutes;

One 5 hp transfer unit, especially designed and fitted for propane, with 2½" suction by 2" discharge, and a 1" vapor line, for unloading tank cars or transports at the rate of 60 gallons per minute, or loading a truck tank

of 1300 w. g. capacity in 28 minutes. This pump is also of the double ball-bearing, turbine type.

All electric equipment used in connection with this installation is explosion proof.

This equipment and the necessary piping, valves and fittings to connect the system for complete operation, with detailed blue prints and minute instructions for erection of same, was shipped to the Tate plant in six crates. So thorough was the packing of the crates and the preparation of instructions and blue prints for installation that from the time the first nail was pulled from the first crate until the equipment was completely installed by the two men assigned to the job, and in full operation, only nine hours were required.

This operation should not only be the source of much pride to the firms supplying the equipment, but to Henry Tate, president and owner of the Tate Heating Co., which serves industries, individuals and communities in a territory covering a radius of 100 miles from Morris. In addition, Mr. Tate serves Greyhound bus restaurants in four states with their cooking and heating fuel, as well as commercial installations for heating, drying and power for cabinet factories, power for strip coal mining operations and carburetor installations on many farm tractors for LP-Gas fuel consumption.

Mr. and Mrs. Tate, who have operated this business for six years, maintain offices and modern display rooms where every type of gas-using appliance is stocked and sold, in downtown Morris. They employ 15 people in this growing business, and all company trucks and cars are equipped with "Algas" carburetors for use with LP-Gas.

Skelgas Service to Install Bulk Plant in St Joseph, Mo.

Skelgas Service Co. is planning to build a \$25,000 installation in St. Joseph, Mo., with present plans subject to approval by the city council.

The company's plans to make St. Joseph a distributing point for its product and installations will include bulk storage tanks, a bottling plant and a warehouse. A tract will be acquired on the Santa Fe railroad lines, with a long term lease to be taken on the grounds.

Clifford Marker is in charge of the St. Joseph branch of the Skelgas Co., which now has a retail salesroom at 925 Frederick Ave., and he will direct the bulk plant activities from that location.



New officers and directors of Missouri Liquefied Petroleum Gas Association—Standing, left to right: A. E. Elkins, H. C. Fuerhoff, John Bales, Monte Taylor, J. A. Felder, W. A. Schuette, Harvey Gigstad. Seated: L. H. Davis, G. W. Ryan, J. E. Moore, Jr., treasurer; K. H. Dickson, president; L. D. Beckett, 1st vice president; Robert Hadlick, executive-secretary; C. A. Enos. Officers not in picture: H. G. Baur, V. G. Dietrich.

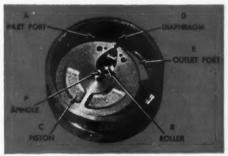


The many advantages of Neptune Red Seal Meters can be summed up in greater profit for you! They assure business-like selling and accurate record keeping—two highly important factors in successful LP-Gas marketing. Convince yourself—write for complete in-

formation. Do it now!

Sustained Accuracy is Yours! The Neptune Red Seal LP-Gas Meter has a measuring chamber in which only the piston moves! LP-Gas enters port (A), pushes piston (C) around roller (R) on spindle (P) until the liquid leaves through outlet port (E). Diaphragm (D) helps guide the piston motion. No liquid passes through the chamber without moving the piston—unvarying accuracy is assured!





Print-O-Meter Pays Big Dividends . . . LP-Gas customers place great faith in the printed delivery receipt or invoice. Give them this wanted service—create goodwill at the same time—by equipping your trucks with Neptune Meters that have the Print-O-Meter Register. This device prints a ticket that shows gallonage readings before and after delivery. Your copy of the ticket serves as an accurate record for accounting purposes. To identify the meter or to check on the work done by each truck, a letter is also printed on the ticket. Ask for complete details.

TOTTINE RED SEAL METERS

NEPTUNE METER COMPANY
50 West 50th Street, New York 20, N. Y. Branches: Atlante,
Boston, Chicage, Dallas, Denver, Kansas City, Mo., Los Angeles,
Louisville, Philadelphia, Portland, Ore., San Francisco, and Long Branch, Ontario A647

Montana Dealers to Sponsor Safety Legislation





H. E. GERKE

D. O. Mecklenburg

OST recent of the liquefied petroleum gas dealers to organize themselves into a state association for the closer coordination of their activities is the Butane-Propane Association of Montana, their organization being accomplished at a meeting held at the Northern hotel in Billings, Dec. 17.

The purpose of the organization is to keep the members of the industry informed regarding legislation, regulations and, in general, improve the condition of the industry wherever possible. Membership will be open to dealers, suppliers and equipment manufacturers.

Officers elected at the meeting are: H. E. Gerke, LP-Gas & Appliance Co., Billings, president for 2-year term; George Steele, George Steele Co., Butte, vice president for 1-year term, and D. O. Mecklenburg, Montana Butane Gas Co., Bil-

lings, secretary-treasurer for 3year term. Directors were also chosen. In addition to the above officers, they are S. W. Suther, Glacier Distributors, Cutbank, and Fred Jones, Treasurer State Gas & Electric, Great Falls.

Safety was a major issue of the meeting, and it was proposed that a safety code for the state of Montana be adopted. State senators and representatives who had been invited to the meeting expressed their willingness to cooperate in passing legislation that will be fair to dealers and public, alike.

E. E. Hadlick Will Devote Full Time to NBPA Affairs

Elwin E. Hadlick, executive vice president, National Butane-Propane Association, has resigned from the dual position of president and secretary of the Northwest Petroleum Association, Minneapolis, positions he has held for nearly 15 years.

Mr. Hadlick resigned to devote his full time to the work of the National Butane-Propane Association, of which he is executive vice president.

Alpine Butane Co. Will Operate in Texas Field

Paul O. Sergent, Nell Streeter Sergent and Dexter D. Thomas have incorporated the Alpine Butane Co. to do business at Alpine, Texas, with \$10,000 authorized capital stock.

irst home chicago tribune's prize HOME BUILDING PROGRAM





Veteran's home features ceiling radiation heating system using a Bryant Model 26 Boiler

Near completion in suburban Chicago is this attractive ranch style house, the first of 22 new Metropolitan Chicago homes being constructed in the Tribune's Prize Homes Building Program. Like all others in the Program, the house will be owned by a veteran and is being built from a design which won an award in the Tribune's recent Chicagoland Prize Homes Competition.

Featured in this house is a comparatively new radiant heating method in which the pipes and radiant coils are embedded in the ceilings. Walls and ceilings are insulated with rock wool as part of the heating arrangement. Heat source for the system is a Bryant Model 5-W-26 Boiler, with an output of 90,000 btu per hour.

The Bryant Model 26 Boiler, long a favorite in the nation's home radiation heating systems, is made in ten sizes to provide for a wide range of hot water or steam applications. Bryant Heater Company, 17825 St. Clair Avenue, Cleveland 10, Ohio. One of the Dresser Industries.

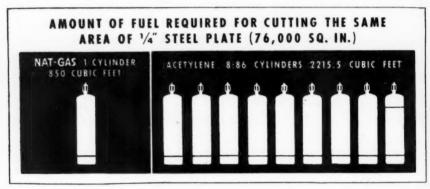


Industrial Propane Gains Ground

THE Natural Gas Co. of Pennsylvania, with its principal offices in Philadelphia and branch offices in several other Pennsylvania towns and in New Jersey, is specializing in industrial accounts.

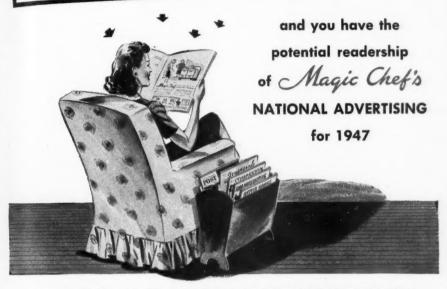
Designating their product as "Nat-Gas," installations have been made in numerous factories and foundries throughout the states in which they operate. Industrial "Nat-Gas" has in numerous instances replaced acetylene with complete success, showing savings from 50% to 75%. In steel cutting this gas is responsible for making the quality of work much better than obtainable with acetylene, according to officials of the company.

The edges of the metal are not



	USED PER 1000 S OF STEEL PLATE CU	
PLATE THICKNESS	COST OF NAT-GAS	COST OF ACETYLENE
	15:2 CENTS	72.8 CENTS
	13.5 "	43.0 "
я 🔾	9.5 "	32.5 "
9	9.5	30.0 "
	9.7 "	25.0 "
	8.1 "	31.6 "
	8.6 "	24.4 "

Multiply this scene 202,600,000 times



AFTER 27 YEARS OF CONTINUOUS ADVERTISING LIKE THIS

is it any wonder that



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More women cook on *Magic Chaf* than on any other range Mare women plan to buy Mark Chal than any other gas range

CASH IN ON THIS PROGRAM
ASK YOUR Magic Chef REPRESENTATIVE FOR DETAILS

AMERICAN STOVE COMPANY • New York • Atlanta • Philadelphia • Chicago • Cleveland • St. Louis • San Francisco

melted down, as they are with acetylene, and as a result a clean cut is made, with no slag deposits to remove from the under side. The thicker the metal the greater the use for LP-Gas.

The Natural Gas Co. has prepared an interesting folder which sets out the use of "Nat-Gas" for flame cutting and foundry uses. This not only enables prospective clients to obtain a quick and accurate impression of the value of B-P Gas over acetylene but it is an ever-present help to the sales force. A reproduction of one page of this folder is shown herewith.

Many dealers specializing in similar accounts will find this valuable for their sales kit when they are endeavoring to sell a propane job to replace acetylene.

Maine Dealer Buys Oil Plant But Sells Propane

The aerial view on this page shows the oil storage facilities, warehouses, garages, office and retail sales room acquired several months ago by Louis P. Bail, U.D.I. gas dealer of Lewiston, Maine. The plant, which formerly belonged to Socony-Vacuum Co., has a 300,000 gallon oil storage capacity.

There are no bulk storage facilities for propane, as Mr. Bail conducts a cylinder operation exclusively, distributing gas in containers filled at the U.D.I. plant in Portland, 35 miles from Lewiston.

This dealer, who has been handling liquefied petroleum gas only since 1941, now has 650 retail customers whose average usage is 400 pounds of propane per year. This is considered high in the territory he serves because of the great number of summer users to be found in that region.

Mr. Bail attributes the very satisfactory balance between winter and summer consumption to the fact that strong selling effort is habitually made to convert every installation to multiple usage—gas for cooking, refrigerating, and water heating.



Aerial view of newly acquired plant of Louis P. Bail, Lewiston, Maine.

Here are automatic, self-contained, forced air gas heating units which eliminate the need of an expensive central heating plant. The Big Quiet Fan and the most efficient heat exchanger ever built on unit heaters make REZNORS tops for economy and comfort.

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Reznor units place heat where and when it's needed, not only in factories, but also in offices, stores, warehouses... in large and small areas.

REZNOR

THE AUTOMATIC GAS HEATER with the . . .

big

quiet



Gas fired unit heaters





OR FLOOR MODEL

A SIZE FOR EVERY NEED

REZNOR CO. MERCER, PENNA.

GAS HEATERS SINCE 1888



NO BOILERS . NO STEAM LINES NO FUEL STORAGE . NO FIRE TENDING

Dealer-Inspector Cooperation Gives Colorado Fine Safety Record

By W. ROY MacGINNIS

Colorado State Inspector of Oils, Denver, Colorado

AM a public servant. However, I am quite normal and orthodox in other respects, so I am a firm believer in a boundless future for the LP-Gas industry. From where I stand, it appears the industry will enjoy expansion limited by only one thing: its ability to Play Safe.

Perhaps my viewpoint is colored by my capacity as an enforcing officer. Nevertheless, it is my opinion that safety, which means "public interest," will govern the growth, the expansion, and the life of this industry.

We are proud of our safety record in Colorado. That record is a credit to every man in the industry in this state. It is the result of many factors, not the least of which is the group of laws now on our state books. In 1943 two short and simple bills were passed, one to make "outside" installations compulsory, the other to provide for proper odorization of gases and to prevent filling of ICC cylinders by anyone but the owner or his authorized agent. Then, in 1945, the legislature enacted a law making provisions of nationally accepted safetv standards enforcible in this state.

This 1945 statute passed both houses of the legislature by a vote

which was practically unanimous. Such unanimity resulted from proper ground-work before the session—chiefly unity within the industry. The dealers held a meeting and agreed on a proposed bill along the lines of the model bill furnished by the Liquefied Petroleum Gas Association. Several members of the legislature were contacted and asked to "front" for the



W. R. MacGINNIS



CLAYTON & LAMBERT MFG. CO.

Dixie Highway * Louisville 10, Ky.

ill onne legislation. Since it represented the openly expressed will of the industry, there was no controversy and prompt passage was effected.

It is surprising how well the average citizen complies with the law: particularly, when he understands the reason for it. I have confidence in the industry and in its customers. I believe the confidence is mutual, and this situation leads to a high degree of compliance. Dealers often write to my office for advice and for interpretation of the regulations. We try to give them prompt, simple and straight replies. So far, we have achieved compliance without a single case going to court. I believe our "firm but fair" policy will continue to get compliance without legal recourse.

Make a Safe Choice

Recently, a couple of traveling salesmen told me of their experience with a hotel detective at a convention. They were a bit noisy in their room along toward morning, when the door opened and the above-mentioned functionary stood smiling before them. In a low voice, he said, "You have two choices. Get quiet or get out." He didn't even wait for an answer, so the story goes, but he got results. The average American is a bit cantankerous about his personal freedom; he loves to have a choice.

I aim to help the LP-Gas industry help itself. Right now I would like to see more careful checking for leaks when installations are finished. This is a simple thing; you might say, quite obvious. Yet I am

amazed at how often the dealer overlooks this simple thing; and how often Fate seems to protect him from the consequences. But Fate is a fickle dame . . . I would rather depend on a sound safety program!

Louisiana Dealers Will Save Money on LP-Gas Shipments

The following letter, under date of Jan. 7, was sent to the National Butane-Propane Association by C. W. Guy, vice president, General Gas Corp., Baton Rouge:

"We wish to advise that as a result of a compromise effective Dec. 15, 1946, the intrastate railroads within Louisiana agreed to publish the Johnson scale of rates for gasoline increased 40% applied to a new estimated weight of 4.7 lbs. per gallon on liquefied petroleum gas movements within the state, to alternate with the present rates now in existence as a maximum.

"In other words, Louisiana intrastate shippers are receiving substantial per car savings on most intrastate movements under 200 miles and will not pay any increased per car charges on any movements over 200 miles. For your information, this compromise results in savings on certain short hauls up to as high as \$75 per car."

New Company Enters Business In Jefferson City, Mo.

Propane, Inc., Jefferson City, Mo. has been incorporated by E. B. Buell, Tom E. McCutcheon and Frank J. Reiter, with \$500,000 authorized capitalization, to "manufacture, refine, smelt, produce, dispose of and deal in gas, gas tanks, gas appliances and other residual products."

Don't start another year without will L-P Gas Systems

YOUR CUSTOMERS WILL APPRECIATE

THEIR LONG YEARS OF SERVICE



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300 GALLON ABOVEGROUND HORIZONTAL PROPANE SYSTEM



UNDERGROUND—ALL SIZES
BUTANE AND PROPANE SYSTEMS



2000 GALLON LP-GAS



LP-GAS TRANSPORT TRUCK TANKS

- . SUPERIOR PERFORMANCE
- . MODERN AND ATTRACTIVE

TOTAL OF THE MENT OF THE PARTY OF THE

. BUILT FOR ENDURANCE



SPHERICAL PROPANE LP-GAS
SYSTEMS—ABOVEGROUND

Utility LP-Gas Systems

- DOMESTIC
- . COMMERCIAL
- . INDUSTRIAL

ASME Code of Manufacture

Prompt Shipment To You

Large Modern Plant

Eager to Serve You

Horizontal Propane System illustrated above is of U-201, ASME Construction. All other UTILITY Equipment is manufactured according to the U-69, ASME Code. Rigid inspection is given each UTILITY Vessel by the National Board of Boiler Inspectors.

BUTANE EQUIPMENT CO.INC.

3301 S. Lamas -1-

1- 74-2146

Dallas Toras .

Laws Made and in the Making

H IGHLIGHTS of legislative matters pending and enacted, are contained in a recent bulletin issued by Arthur C. Kreutzer, legal counsel for the Liquefied Petroleum Gas Association:

CC Ratings (CPA):

- (1) PR 28 as amended Jan. 8, 1947, limits the use of CC ratings to cases of non-deferrable need for the military services, cases in connection with the Veterans' Emergency Housing Program, cases of public emergency and a few other exceptional situations listed therein. As amended it includes the previous directive permitting a manufacturer of 20-lb. and 100-lb. LP-Gas cylinders to reject CC orders if it will cause him to deliver more than 50% of his total delivery in any calendar month on CC rated orders.
- (2) Direction 20 to PR 28 as amended Jan. 8, 1947, states that CC ratings are no longer issued under this directive (CPA formerly assigned ratings for the assistance of Veterans under this direction). It provides for special limitations on the use of ratings now issued and on the use of equipment obtained with the ratings to insure that the Veteran is actively in control of the business to whom the priority is issued and to prevent misuse or resale. Suppliers may delay filling rated orders where they believe that the conditions have not been met.

Colorado:

Senate Bill No. 33 by Taylor "Relating to use, transportation, storage of liquefied petroleum gas; and the design, construction, location, installation and maintenance of equipment used therewith; and to repeal Chapter

184, Session Laws of 1946" has been introduced by title only. It was referred to the State Affairs and Public Lands Committee on Jan. 6, 1947.

Oklahoma:

House Bill No. 15 by Edwards, et al, declaring the business of distribution of "liquefied petroleum fuel" to be a public utility and providing for its regulation and control by the corporation commission has been introduced. It was referred to the Public Service Corporation Committee on Jan. 9, 1947.

South Carolina:

As the result of the recent accident at Greenville, S. C., it is expected that legislation regulating LP-Gas will be introduced in North and South Carolina at the next legislative session. Legislative sub-committees are being formulated to represent the industry in this respect. The association has communicated with several municipalities, where there were indications that immediate action would be taken, requesting due consideration for any laws regulating LP-Gas and submitting the model ordinance.

Another Green's Fuel Outlet Established in Greer, S. C.

Word has been received that Green's Fuel Gas Service, Inc., has recently been incorporated and began business in Greer, S. C., on Jan. 1. F. G. Crews was elected president and James E. Terrill named secretary and treasurer.

The company will specialize in underground systems and handle a complete line of appliances and equipment.



TECHNICAL MARKETING ASSISTANCE CAN HELP **INCREASE YOUR SALES!**

BARTLESVILLE, OKLA.

DISTRICT OFFICES IN NEW YORK, CHICAGO, PHILADELPHIA, DETROIT, ST. LOUIS, DISTRICT OFFICES IN NEW YORK, COTORDO, PHILADELPHIA, DETROIT, ST. LUDIS, MIBBING MILLO, HIBBING MILLO, MIBBING THE WORLD'S LARGEST MARKETER OF LIQUEFIED PETROLEUM GAS



Bottled Gas Keeps Industries Running

DURING the recent coal strike, the city of Richmond, Va., issued restrictive orders upon the use of manufacured gas, with only domestic users, hospitals and essential bread bakeries allowed to use the gas.

As a result of this, the Bottled Gas Corp. of Virginia was called upon to supply the needs of industrial users of gas. E. O. N. Williams, president of the company, reviews the emergency in a recent letter and tells how bottled gas came to the rescue of vital industries:

"When Richmond issued its restrictive order on the use of manufactured gas, we at Bottled Gas Corp. of Virginia, were deluged with telephone calls from practically every industrial user of manufactured gas, requesting and urging us to furnish them with propane for the duration of the emergency. Calls came from all the printers, linotypers and monotypers in town, as well as from all cake bakers, candy and soap manufacturers.

Bakery Needed Help

"The biggest job we were asked to handle was installing propane gas for Continental Baking Co. for use in their rotary fish ovens. The Continental Baking Co. was in the midst of baking their annual fruit cakes for the Christmas season.

"To take care of this installation, a %" copper tubing was run from the pavement to the third story and through a window directly to the ovens. A high pressure test of 200 pounds was made on this line and we installed five cylinders with a 'Rego' high pressure regulator. The chief of the fire department in Richmond recommended the installing of a box



E. O. N. Williams, president, Bottled Gas Corp. of Virginia, and R. A. Gary, Jr., plant engineer of Continental Baking Co., watch serviceman install new cylinder.

around the cylinders on the edge of the pavement to prevent tampering by the public and, as an extra precaution, the copper tubing within 20 feet of the pavement was encased in a metal pipe to prevent any vandalism. The operation was installed within a few hours after the order from the city of Richmond was issued and baking fruit cakes was continued until the coal strike was called off.

"The operation was very successful and proved that bottled gas can come to the rescue when it is necessary.

"The Bottled Gas Corp. of Virginia also installed gas for the Virginia state penitentiary, which does most of the printing for the state of Virginia, as well as for several other printing concerns in town for use in their monotypers or linotypers. In each case where we made an installation we ran a direct line from our installation to the particular appliance. This was a safety measure because we did not deem it advisable to run propane into the manufactured gas lines of the various buildings, on account of the possibility of leaks."



L-P GAS CONVERSION BURNER sound planning is backed by every advancement in modern tooling and modern plant layout.

Every part of every model in the Consolidated Gas Burner line has been developed with these objectives in mind: compactness of design, maximum ease of installation, freedom from service worries, top burning efficiency.

We are interested in hearing from dealers and distributors who can market a line of year 'round profitmakers in automatic heating and low temperature freezing for home and industry. We have an unusual set-up to offer. A wire, phone-call or letter will get immediate attention.

CONSOLIDATED INDUSTRIES, INC., LAFAYETTE, INDIAHA

"The Big Boss"

By GEORGE H. SCHLATTER*

Director, Sales and Service Training Department American Stove Co., St. Louis



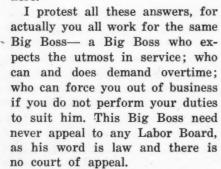
PROBABLY if I were to ask any member of this group, "Who is your big boss?" I would get a variety of answers.

Some of you would say, "Why, I am my own boss — I work for myself."

A n o t h e r would say, "The owner of our company is my boss."

And still an- G. H. SCHLATTER other might answer, "My big boss is in New York—I work under a branch manager

here."



And yet, this Big Boss is sympa-

thetic and understanding as long as you do your job well and deal with him honestly and openly.

The Big Boss I am referring to is the Buying Public—the people who keep us in business and who pay salaries—and who can make or break us. Yes, they are the Big Boss.

Way back in 1915 when I started in the gas business, I was giving the job of receiving teller. One day a woman stepped up to the window to pay her bill and remarked, "I think this bill is a little high."

I looked at the amount and answered, "Do you think so? I don't." Then I proceeded to take her money, marked the bill paid, handed the receipt and change to her and was ready for the next customer.

I didn't know I was being watched until the chief clerk took my place at the window. Then I heard my name called.

Rufus Dawes, the president of the company, had been watching me. I have never forgotten what he said to me. He said, "George, that woman you cut off so bluntly when she protested her bill, is your pay master. The company is the only transferring agent."

In the years that have passed, his words have come back to me many times, as I, too, have been cut

^{*}A paper delivered before the Oklahoma Liquefied Petroleum Gas Association, Oklahoma City, Sept. 19-21.

LONGER LASTING



McDonough Steel Company craftsmen build butane and

propane tanks to last. That is one reason why members of this industry have relied on McDONOUGH tanks for nearly twenty-five years. Why not use the facilities and skilled personnel of McDonough Steel for your tank orders.



*McDONOUGH STEEL CO. tank installations have these three essentials: sound engineering, finished craftsmanship and exact conformity to specifications. PATRICK W. McDONOUGH, President

McDonough Steel Co.

MCDONOUGH STEEL CO.

800 75th AVENUE . OAKLAND 3, CALIFORNIA

off bluntly when I felt I deserved at least a courteous explanation about something I was spending my money for.

If one gets the idea that without the General Public there would be no jobs and no need for people to hold them, then one appreciates just what a Big Boss the Public really is.

I believe we can agree that our Big Boss is our customer or our prospect. The next logical question would be, "Well, how should we treat him?"

In my opinion, the first thing we must do is to train ourselves to look through the eyes of the customer and see each problem from his point of view.

As a start, let's picture ourselves going into any store to make a purchase. As we approach the counter, what is the first thing we expect from the sales person? I'm sure your answer would be either.

"Immediate Attention or Prompt Service." Certainly you would not care to wait until two clerks finished their conversation before you received attention. Nor would you care to wait a week or more for a salesman to make his appearance at your home if you wanted to buy something requiring a survey before being given an estimate or bid—such as a butane system, a new roof, a heating plant or home insulation.

Above all, the Big Boss does expect "Immediate Attention and Prompt Service." His first impression of you or your company is

made by your attitude and your interest in serving him.

The next thing you would expect is "Courtesy." Even immediate attention unless accompanied by a courteous and pleasant manner, is worthless.

In the rush of today's business world there seems scant time for courtesy and for that reason it is scarce. Therefore, it is valued by the Big Boss.

Importance of Politeness

When we find a person really polite, we can't help but remember him. We feel a spark of something—maybe it is a sort of gratitude for being made to feel important, but we as customers do like to receive it.

So remember our customers are just like us, only on the other side of the counter or desk.

If you receive prompt attention but the sales person displays a sort of bored attitude, you begin to lose interest and your mind travels from the problem of buying to the building of a dislike for the salesman.

The third thing you expect is "Interest In Your Problem." All buying constitutes a problem. The problem of price, of material, of style, of quality, of size, of suitability, of color—you could go on naming problems that might confront the purchaser. For each sale there is a separate problem, or set of problems to be solved, and no problem of any kind was ever solved without the application of interest. And every customer has



UPKEEP COST—50c . . . Says Pittsburgh Water Heater Sales Co. —

From Ft. Worth, Texas, Mr. Charlie Clark writes that his company, over a period of 15 months, has pumped 1,494,707 gallons of Butane with their Roper 2" Pump. He states that upkeep cost during this period was 50c spent for a ring of packing.

Here's more case-history proof of the low cost, dependable service you obtain with a rotary pump designed for L-P Gases. When you have a pumping job . . . Butane, Propane, Butane-Propane Mix, fuel oil, or gasoline . . . either for bulk station or tank truck service, it will pay you to consult Roper. Compact, light in weight, and easy to install, Roper pumps will help you reduce your equipment and maintenance costs.



Write for Bulletin

Get Full Story of New Roper Features. Send for Bulletin Today!

GEO. D. ROPER CORP. 102 Blackhawk Park Avenue ROCKFORD, ILLINOIS

Convenient Sales Offices in Principal Cities

FEATURES OF ROPER L-P PUMP

- Rugged, Equal Size, Semisteel Pumping Gears.
- Hydraulic Lubricating and Cooling Principle
- Ten Special L-P Packing Rings
- Long Leak-Proof Service
- Non Corrosive Stainless Steel Shaft
- Relief Valve Operating at Pressure Differential of 10% or less
- Axial Hydraulic Balance-4 High-Load Bronze Bearings



the right to expect this interest in his particular problem.

The fourth requisite is "Know-ledge of Merchandise." If the sales person does not know the merchandise, doesn't it irk you? The Big Boss has a right to expect the representative of the company to know all about what he is selling, and he expects and demands help in making his selection.

Of course, we know that the salesman must take the product as his company gives it to him and then sell it.

He can't alter its appearance, its distinctive features, or its price. He can, however, know that product thoroughly and completely and all the services, comforts, and conveniences it affords the owner.

Knowledge of merchandise, therefore, is important.

The fifth is "Patience And Tact." If you have a problem and you must make a decision as to how to spend your cash, don't you expect the sales person to be patient with you as you are making your decision?

And by patience I don't mean standing there like a bump on a log saying nothing. The sales person must know—(1) When to talk, and (2) What to say and how to say it. That is what I mean by tact.

Then, lastly, how about "Enthusiasm And Sincerity"? As we make a purchase we don't like to listen to a monotone voice nor do we appreciate the "over-gushing" type. We do appreciate a person who is enthusiastic. We want that enthusiasm to be sincere and, along with it, we demand honesty.

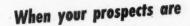
Now if we expect these things from a sales person selling us, then why in heaven's name don't we train people who contact this Big Boss on those particular points?

Let's look at those six points closer:

- 1. Immediate Attention or Prompt Service.
 - 2. Courtesy.
 - 3. Interest in Your Problem.
 - 4. Knowledge of Merchandise.
 - 5. Patience and Tact.
 - 6. Enthusiasm and Sincerity.

Now summing up what pleases us doesn't seem to add up to such a difficult job, does it? We honestly feel that what we ask is only right. We are making no unreasonable requests. But we have only to go on a shopping tour to realize that the people who serve us have either never been told about these things or are completely disinterested. When we buy, we are the Big Boss. So, let's see why there are so many unsatisfactory employes contacting this Big Boss.

First of all, the difficulty lies in the selection of man power. Here's a job and here's a person who needs a job! Do we as employers bring those two together with little attention to determine if one is fitted for the other? I'm afraid we do. It should only take a short interview with an applicant for a sales manager to determine whether or not he has the necessary qualifications for making a good impression. A man without the ability to make a good first impression will seldom make a successful salesman. An easy, pleasant manner; a quick



UNDERMANNED and OVERWORKED.

Savory

Stainless Steel Toasters LP Gas



When demand is heaviest Savory Toasters do their best work. The continuous conveyor system (an exclusive Savory feature) keeps the loading end clear at all times, carries the toast through the three heating zones and unloads itself—a completely automatic cycle which Savory and Savory alone can give you.

What does that mean to you? It means Savory and Savory only provides a completely satisfactory solution to the toast problem of schools, hospitals, restaurants, lunch wagons and institutions. In solving this prob-

lem Savory Toasters demonstrate the high quality production and low cost operation of LP gas which frequently results in the installation of additional heavy duty LP gas cooking equipment.

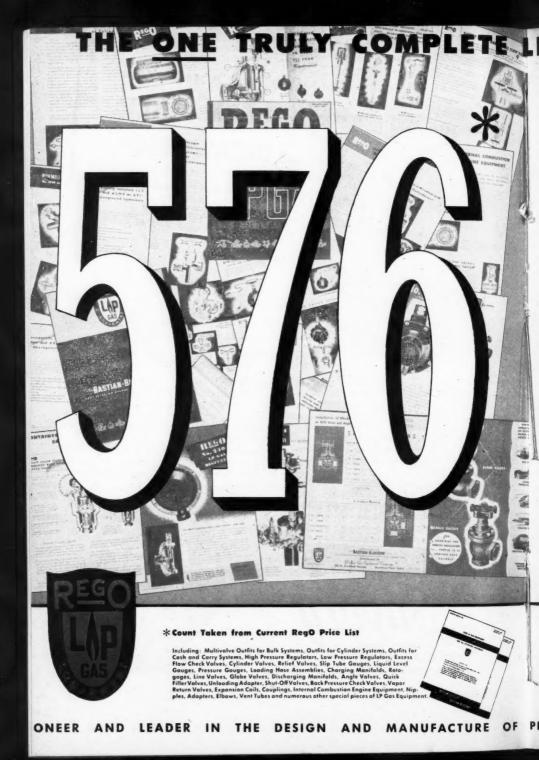
Savory is cooperating with LP gas dealers who are developing the profitable commercial cooking load. Write for details.

SAVORY TOASTERS are available in bread, bun and sandwich models.

Savory

137 PACIFIC STREET, NEWARK 5, N. J. Sold by leading LP gas dealers everywhere





ELINE OF LP GAS EQUIPMENT

576 SEPARATE ITEMS IN THE REGO LINE MEANS SATISFIED CUSTOMERS FOR YOU

The wise LP Gas distributor or dealer is not attempting to solve the problem of shortages by accepting a substitute for RegO quality. He knows that RegO's greatly expanded production facilities are working overtime to help him meet the demand for this time-tested line.

The well-informed distributor or dealer knows that the RegO line with its enviable record of years of outstanding service in the LP Gas field, offers a complete selection of equipment, ranging from the largest railroad tank car valve to the smallest fitting...all RegO-designed and service-tested to give him the utmost in customer satisfaction and increased gas loads.

He knows that the broad range of the RegO line means that there is RegO-designed precision equipment to give long, dependable, trouble-free performance in any application he may encounter in serving his LP Gas customers.



The BASTIAN - BLESSING Company

4201 W. Peterson Avenue

Chicago 30, Illinois

Exclusive Features That Make O'Keefe & Merritt Easier to Sell!



use of Butane or Propane. You'll be proud to sell the finest O'Keefe & Merritt ever built.

O'KEEFE & MERRITT CO.

3700 East Olympic Blvd., Los Angeles 23, Calif.

tip adjustment makes broiling easier than

smile; a voice that is well modulated; an enthusiastic attitude, all these are musts for the salesman. Then the person who has a stern, cold face; who has little to say; who seldom smiles; who complains—this man is not for our job and no matter how much we may need help, we should never hire him! There are too many square pegs in round holes now!

Should Raise Sales Standards

We should begin to dignify the profession we represent by demanding more of the people who join our ranks. It has been unfortunate that for years past a person with no special training, a man who wasn't a lawyer or a doctor or a machinist or a carpenter—oh well, he could sell! Or the woman who wasn't a typist or a designer or a nurse or a beauty operator, who in short was a housewife with no special qualifications—oh well, she could always sell! The wages were small and the demands slight.

This then is our starting point to demand more of our applicant. We must refuse to hire people we know would never be successful, just in order to have the job filled.

Too many salesmen are placed on payrolls who are misfits from the very first, mainly because the sales manager has never taken the time to make a job analysis. Most of us only think in terms of sales. We forget that Service must be maintained. . . . Bills must be collected. . . . Complaints must be rectified. . . . Errors must be explained. . . . Price rises must be accounted for. . . . And many

other items can be added to a list of things we expect of this new man.

If we are really conscious of what we expect our salesmen to do for us, then it is essential that we think of certain qualifications a salesman should have to make a success of our business.

It would be a good thing for every man who hires employes to write down on paper, so he sees it in concrete form, just what qualifications he would like to have in his salesman. He would be amazed and rather shocked, I fear, to see that he has been pretty far off the track in doing his hiring. Remember, the Big Boss appreciates the right kind of man. He doesn't mind spending his time listening to such a representative. Remember, too, that in the eyes of the Big Boss, this salesman is your company.

A Salesman's Pay

Now, of course, the first snag we run into is this-that better help, more efficient help, costs money. No one can tell anyone else how to run his business, but it seems logical to me that it would be cheaper in the long run to hire one good man, spend money training him properly and have him represent us successfully. And, of course, the man who is successful makes money for himself and his company. It would be cheaper to pay this man more money, to get the type we want, rather than waste money hiring and training two men for less money who proved to be unsatisfactory!

That is a point each sales man-

ager must meet and debate in his own way, but it is the Starting Point of being able to satisfy the Big Boss by having good, capable men represent us.

Then once we have hired a good man, what about training him? Too often a man with fine possibilities is thrown on his own, allowed to flounder around and finally become completely discouraged and bewildered. He leaves us. Once again the person hiring men should make a study as to why the salesman was lost to the company. Oftentimes such studies bring out glaring weaknesses in the sales set-up.

Develop a Sales Plan

If the company has no training program, then for your own sake create an outline of what this new man should know, what it is necessary for him to know, what you want him to say and do under all circumstances.

Real sales training, real education, isn't just one-shot proposition. You can't hold an intensive training course for a few days, fill a man full—too full—and then send him out and forget about him. Real training should be a constant process of advice and consultation. A person can only absorb a certain amount of what he hears, so it is imperative that he hears over and over what it is necessary for him to know, until it becomes a

part of him and he retains it unconsciously. With such a knowledge of your business and product, the salesman gains confidence and he can't help but become full of enthusiasm — and the Big Boss likes that spirit.

There is always Company Policy to be taught and all company policy is important. It really sums up to "rules and regulations" of the company. Each company has them and they must be well defined.

But your representative must pass this information on to the buyers and it behooves management to see that a man doesn't just put it down as "that's the rule of the company—take it or leave it."

Company policies are a necessary part of each salesman's equipment, but the interpretation he gives to these rules is all-important, and that takes training and supervision. We have now a list of five vital requisites for Sale Management.

- 1. Proper Selection of Men.
- 2. Proper Compensation.
- 3. Sufficient and Adequate Training.
 - 4. Constant Field Supervision.
 - 5. Good Management.

If we as sales managers realize the importance of these five phases of our jobs and do something about it, the Buying Public—or our Big Boss—would be better served and much more pleased.



AMERICA'S FINEST

on the basis of performance

In trouble-free, reliable, fully automatic operation, DAY & NIGHT Water Heaters are front rank performers. And when it comes to engineering and exclusive economy features, DAY & NIGHTS are truly "America's Finest" water heaters.



Day & Night Butane appliances are exported by Anchor Oil Co., Houston, Texas

DAY & NIGHT MANUFACTURING COMPANY Monrovia, California - One of the Dresser Industries

Good Appearance Best Means to Sales

GOOD appearance is better than the best location! That has been proven by the experience of the St. Petersburg (Florida) Gas Appliance Co. In the midst of the war, E. S. Lanning and C. R. Anderson, owners and managers of the firm, decided that their store on the main business stem of the Sunshine City would have to be enlarged for the business they saw ahead when peace came.

No structure on Central Ave. fulfilled their ambitious plans. So they decided to move a block south. They found the ideal location in the two-story 40 x 100 concrete block-and-stucco building at 770 Second Ave. South. This they converted into a large handsome establishment for the sale of butane-propane gas and equipment to serve their southern Florida territory.

They painted their plant glossy

By JOSEPH LAWREN

white, lettered it in jet black, opened up two large display windows and then lit up the interior in a blaze of neon lights.

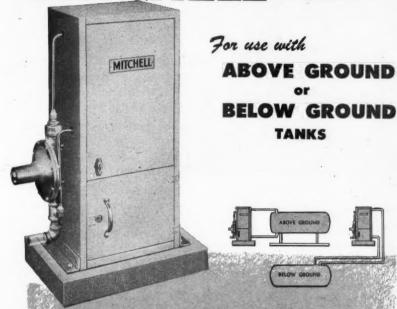
Upon opening, they announced to St. Petersburg, and the territory for 50 miles around, that their new building was but a block from the main business artery and that there could be found parking space which was sought in vain at the old location. This was a lure to the auto-riding customers and has paid off in increased patronage.

The St. Petersburg Gas Appliance Co. is the local distributor for Green's Fuel Suburban Gas and is the Sunshine City's oldest liquid petroleum distributor and gas appliance and



The new home of the St. Petersburg (Fla.) Gas Appliance Co.

THE MITCHELL VAPORIZER



The Mitchell Vaporizer is a compact, efficient unit for converting Liquefied Petroleum Mixtures into gas of unvarying BTU content at uniform pressure. Easily installed, its operation is equally efficient with either above ground or below ground storage tanks.

A patented safety principle eliminates the possibility and danger of excessive pressures and automatically varies the rate of vaporization to suit the demand.

One of the most important developments in the LP Industry, the Mitchell Vaporizer now provides a safe, economic method of using Liquefied Petroleum for the heating and power demands of the domestic, industrial and automotive fields.

Write for complete details and descriptive literature

JOHN B. MITCHELL COMPANY

Manufacturers of Fine Machinery for Forly Years

DALLAS, TEXAS

FEBRUARY - 1947

News

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C. R. Anderson and E. S. Lanning, St. Petersburg (Fla.) Gas Appliance Co., have a few appliances, at last, for delivery.

equipment establishment. It was founded 18 years ago.

"We are convinced," said Mr. Lanning and Mr. Anderson "that larger quarters and a better front is better than putting on a front in a restricted store on the main street."

As their sale of Green's fuel grows they find the need of adding to their present four bulk storage tanks, now having a total capacity of 33,000 gallons. But it is in the sale of gas appliances that the owners are confronted with their greatest problem. For, like most other dealers, they possess a backlog of orders which will take a long time to fill. Meanwhile they are engaged in a campaign of retaining the good-will of their impatient customers. And that, the partners maintain, is a job which calls for the greatest of tact and finesse.

While their importunate customers are calling for new appliances, they are served with Servel's "Homemaker's Digest," fans which proclaim the virtues of "Magic Chef" gas ranges, Clow "Gasteam" radiators,

Ruud water heaters, gas floor furnaces and all the other gas appliances, and with yardsticks. As one customer so aptly put it, "The fans are to fan off our hot desire to get the new appliances and the yard stick is to measure the time when we may hope to get them."

To which the partners answered, "Have a heart and a little patience. You know our record in the past. And our desire to serve you today. The appliance you want, and need so much, will be coming along soon—we hope."

"And when the goods come you will find us happy," said Mr. Lanning, "but our customers will be happier."

R. T. Hlavin Leaves AGA Testing Laboratories

Robert T. Hlavin, for several years a member of the staff of the American Gas Association Testing Laboratories, has joined the gas valve division of the Detroit Brass and Mallable Works as assistant to William J. Wildren, manager of the division.



THE Top Griddle IS BACK

When WEDGEWOOD originally introduced the Top Griddle it met with instant acclaim and enthusiasm from housewives everywhere. Then came the war. The resources of the James Graham Mfg. Co. were engaged in Government work. We had to discontinue this popular model. But here it is again, better than ever, available to WEDGEWOOD dealers.

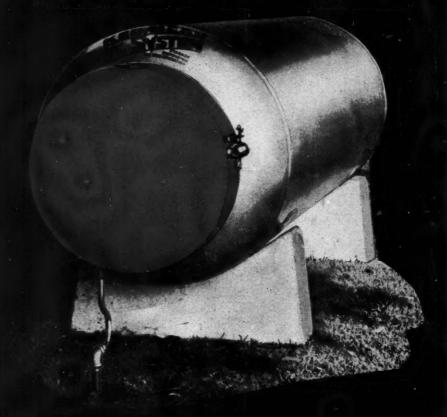


WEDGEWOOD LEADER IN THE WEST

JAMES GRAHAM MFG. CO.

LOS ANGELES . GENERAL OFFICES & FACTORY, NEWARK, CALIF. . SAN FRANCISCO

American "RED HEAD"



THE OUTSTANDING LIQUEFIED PETROLEUM GAS

Storage • Gas Generating • Dispensing

System

AMERICAN PIPE & STEEL CORPORATION

Engineers, Designers, Fabricators

Cable Address AMPSTEEL

CALIFORNIA

QUIZ __Electric Competition - Part 4

• This department is a monthly feature to stimulate thought and to give operators basic industry facts. Clip out for your notebook or file in a standard, 3-ring, loose-leaf binder. Sources of information: The Bottled Gas Manual, Handbook Butane-Propane Gases.

Questions

Answers

Why should the LP-Gas dealer be particularly interested in gas refrigeration?

Gas refrigeration is a summer load builder and helps to even out the monthly demand.

Where does the gas refrigerator help stave off electric competition?

With the investment for a gas refrigerator in the home it is extremely difficult for the electric competitor to sell an electric stove or water heater as the refrigeration load is necessary for them to get into rates that sound competitive.

Why does the Servel gas refrigerator operate silently while electric refrigerators are noisy?

Because the Servel has no pump, motor or other moving parts to wear. Electric refrigerators are mechanical, growing noisier with age.

Why do gas refrigerators offer continuing low cost for operation and maintenance as compared to increasing costs for electric boxes?

In the Servel there are no moving parts in the freezing system. In electric boxes there are three or more moving parts, depending upon the make. It is the wear of such moving parts, causing loss of efficiency, which results in high operating costs and which necessitates repairs and eventual replacement.

5

Aside from moving parts in the freezing system, are there any other weaknesses in electric refrigerators which are not found in Servel gas refrigerators?

6

How do customer warranties differ?

7

Why is the "continuously operating" principle of Servel better than the "intermittent" operation of electric refrigerators?

8

Do Servel refrigerators dry out food in the manner charged against electric boxes?

9

In two surveys (Curtis Publishing Co. and Philadelphia Electric Co.) the average lifetime of electric refrigerators has been quoted at between 7 and 8 years. What is the average life of the Servel refrigerator?

10

Which kind of refrigerator has the highest trade-in value?

Yes, electric refrigerators require starting switches, overload cut-offs and starting relays, none of which are required in Servel. These, too, are a source of service expense.

The gas warranty is comp'ete—unit and controls. The electric excludes starting switches, starting relays, overload cut-offs.

A continuous refrigerating cycle means constant cold food preservation temperatures. A refrigerator which operates intermittently will allow greater fluctuation in food preservation temperatures.

Electric refrigerators have always been somewhat worse offenders in this respect than gas refrigerators. The 1947 Servel offers an exclusive feature known as the "cabinet drilling unit." Since this unit is designed to operate at above freezing temperatures, moisture will remain in the air rather than freezing to the metal which cools the air. If moisture can be retained by the air, the tendency on the part of food to dry out will be effectively reduced.

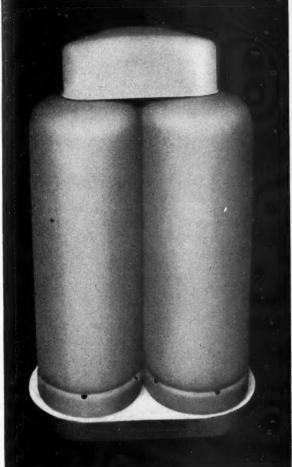
Since both the Curtis Publishing Co. and the Philadelphia Electric Co. are located in Philadelphia, it is interesting to note that the Philadelphia Gas Works furnishes a 10-year warranty on the gas refrigerators they sell. Servel records confirm the statement that gas refrigerators are capable of longer lived performance than electric refrigerators, ranging from 50% to 100%.

The National Refrigerator Market Report quotes higher resale values for Serve's than for comparable electric models by 20%, or more. Government figures were even greater when OPA ceilings were in effect.

SUBJECTS TO BE COVERED IN FORTHCOMING ISSUES:

- · Gas Lighting · Space Heating
- · Tools for Your Kit.

NOW ... AN ALUMINUM HOUSING FOR QUICK HOUSING



NEW D-1

ONE PIECE ALUMINUM

NEW TYPE SLIP HINGE

COMPLETE PROTECTION

FITS ALL REGULATORS

HANDSOME APPEARANCE

LIGHT WEIGHT SHIPPING

Here is our latest model with many new features in design, construction and appearance. Now you may have all this and delivery, too. The D-I is made of aluminum. We have enough to insure prompt delivery and low shipping cost. Write for details on scheduling your order. Stampings, Inc., Davenport, Iowa.

WRITE FOR COMPLETE NEW CATALOG

SIGNPINGS.

DAVENPORT, IOWA

Converting City Homes to Butane Opens New Field for Dealers

HIGHLY unusual means of building up a butane gas load has been developed by Bridgeton Appliance Co., Bridgeton, New Jersey, through converting existing natural gas appliances installed in Bridgeton homes over to LP gas.

"This market has proven adequate enough to absorb all of our time and facilities while awaiting the return of full-scale butane appliances and gas systems for rural promotion," states Joe Furey, who, with Chester Hickman, operates the

dealership. "Like most other liquefied petroleum gas dealers, we ignored the local market before the war while ranging afield contacting rural prospects. Then, when we discovered that the average homeowner in Bridgeton was having trouble with cooking during the peak noon and evening periods, due to insufficient natural gas pressure, we turned to the market right around us—and discovered it was ample enough to keep us busy."

Bridgeton, largest town in the



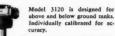
Joe Furey, New Jersey dealer, beside one of ranges he converted for LP-Gas.

SAFETY

PROVED IN OVER 750,000 INSTALLATIONS!

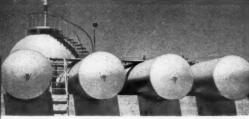
ONLY ROCHESTER MAKES LP GAS **GAUGES FOR EVERY APPLICATION**





MAGNETICALLY ACTUATED. LEAKPROOF

Model 3108 is designed for end and side mounting and possesses all of the safety features applying to Model 3120.



A typical Rochester Gauge installation-Butane Corp., Phoenix, Arizona

Rochester LP Gas Float Gauges Are Used By Every Leading Producer and Thousands of Distributors

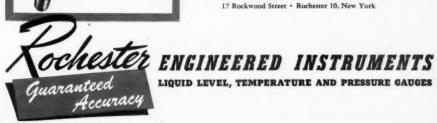
For twenty years, Rochester pioneered and developed the only LP Gas Float Gauge which is both Underwriters' Listed and proved in over 750,000 installations. Be sure the gauge you install on your bulk systems or ICC cylinders bears the "Criterion" trademark.

- Explosion proof-there is no shaft connection between gauge head and float inside the tank. Pointer is actuated
- by permanent, non-electric magnets.
- Accurate—each gauge is permanently calibrated. The metal float (built to withstand 800 psi) is precisely balanced to meet varying requirements in specific gravity and pressure.
- Easy to install-simply bolt the gauge to the tank opening and you're all through.

On any basis you can name, Rochester LP Gas Gauges are dependable. The sooner you standardize on them, the quicker you can forget indicator problems.

ROCHESTER MANUFACTURING CO., INC.

17 Rockwood Street · Rochester 10, New York



Tri-City area on the Southern New Jersey peninsula, has experienced considerable difficulty in maintaining ample gas pressure ever since 1941—due to the importation of thousands of migrant workers to operate huge food plants, all of whom were placed on the gas mains through housing projects, new government home building, step-up of industrial plants, etc.

Peak Hour Shortages

The result has been that many housewives found little or no flame available when time came for preparing the evening meal. Even though citizens attempted to stagger cooking hours, the problem had become serious to the average homeowner. During the peak load period this meant that hundreds of workingmen were eating cold meals or attempting to solve the problem with cookstoves which long ago should have been relegated to the scrap heap.

Bridgeton Appliance Co. immediately "rushed to the rescue," by simply contacting house after house. and inquiring whether or not the gas pressure problem existed there. After two weeks of doorbell ringing in this way, the partners found no outside contacts necessary. The word that a simple tank hookup could provide not only plenty of gas but a hotter, more efficient flame, had spread through Bridgeton rapidly. "We had more phone calls than we could answer," Mr. Furey grinned, "all from anxious housewives demanding that we convert their ranges, water heaters and even gas refrigerators over to butane gas." One newspaper ad was run, specifying the steps necessary. Since then there has been no advertising whatsoever.

For making the conversion, the partners charge a flat \$5. This includes changing the orifice and adjusting the air jets on each gas burner. The company insists that the metropolitan customer takes a two-tank gas supply system, consisting of two 100-pound units, to prevent running out suddenly and causing emergency needs. "By insisting upon this we also can operate our delivery schedule more smoothly," Mr. Furey indicated. "At first we tried single-tank installations, but found that customers running out of gas were a serious ill-will hazard. Now every house is burning butane from a dual cylinder installation." Charges for the installation complete are \$19.75, and gas consumption is averaging two tanks every three months on "town conversion" circuits.

Encouraged by Utility

The firm has a long list of waiting customers at present, and is getting encouraging assistance from the local municipal gas utility, which is able to deliver more gas to several Bridgeton industries in desperate need of it. All tank systems are being used up in this work at present.

"One outcome which we hadn't expected is wholesale endorsement of butane gas by every customer served," Mr. Furey said. "Due to slightly higher costs we expected

DEEP SEA FRYERS have made me a lot of friends



PERFECTLY FRIED FOODS FRIED FASTER AND MORE ECONOMICALLY

COMPLETE LINE to meet each individual need best. Prompt delivery.









SPECIALITIES APPLIANCE CORP. 343-A E. Ohio St., Chicago 11, III.



20" x 20" Heavy Duty



14" Square Twin



10" x 11" Twin

some reaction to the contrary—but apparently controlled heat and faster cooking have sold themselves to every housewife. We see no reason why we cannot continue to sell in the city field for a long time to come."

Side Line Becomes Main Line

Bridgeton Appliance Co. started out originally as an electrical appliance repair shop, branching into butane gas and appliances two and a half years ago. The firm is a Soconv-Vacuum franchise, hauling Mobilflame cylinders from a storage warehouse 25 miles away. Three trucks are used for gas delivery. with platforms for range, refrigerator, floor furnace and other LP-Gas equipment handling. Cylinders are advertised in 100-lb, 50-lb and 20-lb sizes, the last a specialty important for selling small scale users such as summer home visitors. campers, and cabin owners who drive in after their own gas supplies.

"We're not forgetting the future farm market while concentrating on these city conversions," Mr. Furey said. "We have three salesmen out in the field at present, canvassing for future gas installations, appliance sales and service work. We're getting enough service work, both electrical and gas, to keep our shop busy, and offer these repair facilities as a good reason for buying from us. Eventually we will expand butane equipment and service into the commercial field, such as butcher shops, restaurants, and institutions."

LPGA Section Meets At Salinas, Calif.

A SPECIAL meeting of the South Pacific Section of the Liquefied Petroleum Gas Association was held at the Santa Lucia Inn in Salinas, Calif., on Jan. 3. This is the third in a series of similar meetings which have been held by the South Pacific section to afford dealers and distributors in local areas opportunities to attend meetings without going great distances. The two former ones were in Fresno and Sacramento, Calif., and a fourth was held in Los Angeles January 28-29. This will be reported in the March issue of BUTANE-PROPANE News.

The Salinas meeting was well attended and dealers listened to a program of important discussions of the industry, many of the speakers the same as those who had presented similar subjects at the earlier meetings above mentioned.

Tallent Ransome, chairman of the South Pacific section, presided at the meeting. The program was arranged by Don McNary. Speakers and their subjects follow:

"Salinas Welcomes You" by O. T. Barrett, Barrett Butane Service; "Financing in the LP-Gas Industry," by Ernest C. Jensen, Bank of America; "Profits in Appliances," by Jack Deggendorf, James Graham Manufacturing Co.; "The Psychology of Credit," by H. J. McMahon, Standard Oil Co. of Calif.; "Properties of LP-Gas That Affect Fire Hazards," by Oliver Johnson, Standard Oil Co. of Calif.; "Operational Safety in LP-Gas Transportation" by Ralph Rayburn, Swett & Crawford, and "Resolutions and Revolutions" by D. D. Purrington.



Floor Furnace Markets

STANDARD DUAL WALL FURNACE. Heats rooms on both sides of the wall, Heats rooms on both sides of the wall, and is so well designed, that no reand is so well designed, that no re-and is so well designed, that no re-papering or replastering is essily ino papering or install it, fits essily ino new or old homes. Hearing well fur a solves the former customers -fur a whole for of your customers -for a whole for of your customers. furnace solves the heating problem for a whole for of your customers.

for a whole for of your customers and this brings new profits to you.

> handsome steamined per safety from the safety builting the safety builting the safety companies will new commences as the safety from cary as the safety from cary safety from cary safety from safety from the safety from safety from the sa one of Jour fasters that will my units.

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SPACE SAVER WALL FURNACE. Newly designed stille uses only 912 from 50 both sides of the wall. Its compact design makes it ideal for compact occurs makes it towar is homes where floor space is limited.

With Rheem, you'll have an A.G.A. approved floor furnace to fit any heating job . . . any customer's needs. This means more quick sales . . . more satisfied customers . . . and more profits for you.

So get this Rheem line of gas heating appliances into your store right away, and then watch your volume go up and up. Call your plumbing and heating jobber ... TODAY. For full information, write Rheem, 570 Lexington Ave., New York 22, N. Y.

Here are two other great Rheem gas heating appliances. The handy gas well heater brings quick, radiant heat to bothrooms and other small rooms. The Rhoom gas console heater is the easy answer to heating spare rooms, workshops or cellar playrooms. Both A.G.A. approved.

RHEEM...making houses into homes

Public Utility Bug-a-Boo Threatens Oklahoma Dealers

A bill proposing to make the sale and distribution of "Liquefied Petroleum Fuel" for "heating, cooking and lighting purposes" a public utility, subject to regulation by the state corporation commission, has been introduced into the Oklahoma legislature.

In issuing licenses, the commission is given the right to take into consideration the necessity for the operation of the business at the location proposed. It also is given the power to require the license or franchise holder to supply the demand for such fuel in the territory covered by his operations. The proposed legislation is known as House Bill No. 15, by Edwards, Blaylock, Jordon, Shumate, Watkins, Field and Musgrave.

Under the present law, regulation

of the liquefied petroleum gas industry is under the state fire marshal's office, headed by T. J. Ellis, and it is not designated as a public utility.

It is understood that a move will be made in the legislature to more clearly designate the kind of fuel intended to be covered by the bill, as the term used might be interpreted to mean gasoline, as well as liquefied petroleum gas.

The Oklahoma Liquefied Petroleum Gas Association has asked permission for representatives of the industry to appear at a committee hearing to oppose terms of the bill as written.

Work of AGA Laboratories Stepped Up Fast Since War

In the year-end summary of the gas industry for 1946, R. H. Hargrove, president, American Gas As-

Immediate delivery on LPG SYSTEMS

Shipments from Bessemer, Alabama, ASME Underwriter Approved Tanks, 125 to 200 pound working pressure, aboveground or underground.

Eight years' experience in building quality tanks.

L. P. G. EQUIPMENT COMPANY

108 W. Concord Avenue, Orlando, Florida P. O. Box 3507, Telephone 5206



ROBERTSHAW

FOR ACCURATE, DEPENDABLE OVEN HEAT CONTROL

FREE! Write for Copies of "More Income For Range Salesmen". A sales course in modern range selling for your salesmen... packed with useful cookery facts and selling ideas. Every range salesman should have



ROBERTSHAW THERMOSTAT CO.

Youngwood, Pennsylvania

FEBRUARY - 1947

" a copy.

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sociation, reports among other activities those of the Testing Laboratories in Cleveland and Los Angeles in their first year of full peacetime operations.

He says that they are extending every possible aid to manufacturers in speeding the resumption of production of gas appliances. Testing and inspecting of new models for compliance with approved standards, and checking appliances back into production on assembly lines, arose above prewar levels at midyear.

Reflecting the resumption of gas appliance production testing activities increased 220% over the year before while factory inspections were greatly stepped up as production was resumed. A decided trend towards gas house heating was reflected in the fact that about 40% of test work

was devoted to gas-designed central heating equipment in addition to extensive testing of conversion burners for existing house heating installations.

Former Employe Purchases Texas Butane Business

Purchase of the Butane Co. at Comanche, Texas, was recently completed by Welch Lawless, who has acted as manager of the company since his discharge from the army.

According to an announcement by Mr. Lawless, he will continue to carry the same line of appliances which the company had previously handled.

The company has its offices in the Rambo building and its storage facilities are near the city limits on the De Leon highway.

NOW Our L-P Gas Correspondence Course Is Available For Home Study

Covering Application and Equipment FOR EMPLOYERS and EMPLOYEES

Summary of Subjects Covered

- I. Theory and General Principles
- 2. Domestic Installation
- 3. Commercial Installation

- 4. Transportation and Equipment
- 5. Safety Rules and Regulations
- 6. Economics

PROFIT By the study of the latest developments, how to balance your summer and winter fuel problem, and the safe installa-

tion operation and maintenance of L-P Gas equipment.

YES the resident classes for those wishing personal instruction start the 15th of each month.

-	MAIL	TH	IS C	OU	P	ON	T	0	D	A	Y			
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National L-P Gas Institute 1109 S. Main Tulsa 3, Oklahoma



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News

- Inspected by independent underwriters
- Welded automatically
- X-Rayed periodically on production line

B, S and B Propane Tanks are making history . . . creating new markets, breaking sales records. All the experience and skill of one of the nation's finest pressure vessel manufacturers is geared for real action . . . NOW! Here's your big opportunity . . . a few dealer territories remain to be filled. Act today to make this your biggest year. Write or wire for complete sales information, merchandising plan, dealers' prices . . . all the facts. Don't delay . . . get your profits early this year!

Address inquiries to the Executive Offices, B, S and B, Power and Light Building, Kansas City 6, Mo.

BLACK, SIVALLS & BRYSON, INC.



HOT TIP

FROM AN ESKIMO

An Eskimo is a dealer who blows cold even when the item is 'hot'. We are mighty proud of our Eskimo dealers. Their unexpected tropical warmth is due to pleased customers who are cooking enthusiastically on their spanking new Welbilts.

When a dealer sells a product, the sale is not finished. Satisfied customers always come back! And today, there's lots of business coming back from satisfied customers.

Take a tip from an Eskimo and point your weather vane where the selling climate is sunny. Welbilt is the 'World's biggest popular priced gas range.' Welbilt means maintained mark-ups for profitable selling.

WELBILT STOVE CO. INC. Maspeth, L. I.

112





MORE Welbilt Ranges WILL BE DELIVERED SOONER!

Kansas and Missouri Men Enter Business Together

The Home Gas and Appliance Corp., Trenton, Mo., has been incorporated with \$30,000 authorized capital stock to engage in the sale of liquefied petroleum gas and home appliances by Mark L. Mahaffie and Frank Achenbach, of Trenton, with Herbert W. Meyer, Walter W. Meyer and Ernest Meyer, all of Mission, Kan.

LPGA Issues Industry Manual for Members Only

The Liquefied Petroleum Gas Association, in conformity with plans originating several months ago, has published and is now distributing to its members a new manual covering the LP-Gas industry. So far, three sections have been prepared, these cover-

ing engineering, legislative and association data.

A specially prepared binder accompanies each manual. Binder and manual are distributed one to a member but additional copies are available at \$15 each. They are not available except to those on the rolls of the Association.

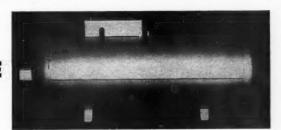
Butane Plant for Dairy

Grant Mock of the Galveston County Butane Co., Galveston, Texas, is installing a butane system on Galveston Island for the dairy of A. H. Schaper.

The new dairy, now nearing completion, will be one of the most modern in that section of the country and the butane system installed will be the largest on Galveston Island.

Basalt PROPANE TANKS

Built to Serve!



EXPERIENCED ENGINEERS and skilled craftsmen with modern equipment and complete manufacturing facilities have designed and produced Propane Tanks, both Sphere and Horizontal types, that are most attractive in appearance and capable of meeting the most severe demands for quality and serviceability. Built to API-ASME Code Standards, these tanks are automatic welded, assuring positive uniformity in construction. We also manufacture truck and general storage tanks. For dependable storage ... specify tanks from BASALT1

Tank illustrated: 150 gallon net capacity available for immediate delivery

Basalt STEEL PRODUCTS DIVISION

BASALT ROCK CO., INC., Dept. BP., NAPA, CALIFORNIA

ews



RECTORSEAL #2 for *L P Connections

* Leak-proof

You can't afford to take chances... even the smallest LP gas connection leak can prove disastrous to you or your customer. Make up every connection with RECTORSEAL No. 2 . . . the sealant compounded from 15 synthetic organic chemicals . . . proved by 8 years service in the Oil Industry.

RECTORSEAL No. 2 retains its plastic elasticity, maintaining a perfect seal for the life of the connection. It will not freeze the joint . . . field tested to 6500 pounds. p.s.i. . . withstands temperatures from minus 50 deg. F. to 350 Deg. F.

RECTORSEAL No. 2 is economical. It costs less than lead or litharge . . . goes farther. Easily applied with brush or swab.

Ask your LP Gas Distributor for RECTORSEAL No. 2. If he can't supply you, write direct.

Manufactured in Houston, Texas by

Rector Well Equipment Co., Inc.

Fort Worth National Bank Bldg. Fort Worth 2, Texas

RECTORSEAL

Patented Trade Mark Rag U. S. Pair OH.

NUMBER TWO

H. W. Harts Made Program Chairman NGAA Convention

H. W. Harts, vice president of Warren Petroleum Corp., Tulsa, is to head the 1947 convention program



H. W. HARTS

committee of the Natural Gasoline Association of America, according to a recent announcement of William F. Lowe, NGAA secretary. The convention is to be held April 23-25 in the Baker hotel, Dallas.

Others appointed to serve on this committee by NGAA President

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J. H. Dunn, Shamrock Oil & Gas Corp., Amarillo, including the following: W. L. Bowser, Atlantic Refining Co., Dallas; F. B. Haverfield, Continental Oil Co., Ponca City; Max Lents, J. S. Abercrombie Co., Houston; James E. Pew, Sun Oil Co., Philadelphia; W. H. Vaughan, Tidewater Associated Oil Co., Houston; and C. R. Williams, Chicago Corp., Corpus Christi.

Technical Work Will Resume

In speaking of the convention, President Dunn stated elaborate plans have already been made to make the technical sessions as complete as possible. "During the war years some of the usual technical committee studies had to be curtailed in the interest of the general war effort," he said. "These committees are now working steadily on problems of benefit to both the natural gasoline and cycling industries and the program will be filled with these valuable reports and discussions."

We Salute GARLAND

A name that has stood for cooking pleasure and economy since great grandmother's day.

One of the oldest names in the cooking equipment industry, GARLAND, is known to chefs from coast to coast as fine equipment for volume cooking.

The beginning of the "Garland story" goes back to Detroit in 1873 when the Michigan Stove Company was established to manufacture coal and wood burning stoves and furnaces. By 1881 Detroit was acclaimed the stove center of the world, with such manufacturers as Art Stove Company, Peninsular Stove Company, Detroit Stove Works and Michigan Stove Company. The Art Stove Company was absorbed by Detroit Stove Works in 1923, and in 1925 the latter and the Michigan Stove Company consolidated. Detroit Stove Works promoted its products under the trade name, "Detroit Jewel," and the Michigan Stove Company employed the trade name, "GARLAND."

SUSTAINED LEADERSHIP

Since 1900, when GARLAND gas fired facilities were introduced into the manufacture of commercial gas cooking equipment, the name has represented progressive leadership which was attained by combining the principles of good cooking equipment with the complete understanding of those who do volume cooking.

Early GARLAND ranges were largely of cast iron, had open manifolds, and were held together with conspicuous rivets and bolts. The GARLAND of today is equipped with accurate oven heat controls and heavy insulation, assuring excellent cooking results and cooler kitchens. Heavy gauge steel has replaced many cast iron parts; manifolds are concealed; and welding has replaced much that was previously bolted and riveted. The result: a smooth appearing range, easier to clean, and simple to operate.

Small wonder, therefore, that we are proud to be associated with an organization enjoying such a history and reputation for sustained production of high type cooking equipment, and to offer the GARLAND line to our dealers in the confidence that there is nothing better in the cooking equipment field.









1. Largest Stove in the World—30 feet long, 20 feet wide, 25 feet high—made of oak and carved in the manner of stoves of 1893 when it was first exhibited at the World's Columbian Exposition in Chicago. It now stands on company property facing the Belle Isle Bridge approach in Detroit.

2. Photo drawing of the Company's huge Detroit plant.

3. View of Hotel Department showing heavy duty equipment in various stages of completion.

 View of the Drill room where cast iron burners and other parts are machined preparatory to finishing and installing on ranges.

SOUTHERN GAS

Atco Bldg.—Tulsa, Okla. Phone 4-2448



& EQUIPMENT CO.

Branches—Sapulpa and Enid, Okla., Atlanta, Ga.

SOUTHERN GAS & EQUIPMENT CO. OF TEXAS - HOUSTON

Weatherhead Co. to Make LP-Gas Cylinders in South

A new branch plant of The Weatherhead Co., of Cleveland, Ohio, is to be located at Houma, La., it has been announced by A. J. Weatherhead, Jr., president of The Weatherhead Co.

The new plant will act as the base plant for the manufacture of steel cylinders for the liquefied petroleum gas industry, and when it gets into production will employ in the neighborhood of 100 people.

It will be known as The Weatherhead Co. Cylinder Division and will manufacture LP-Gas propane cylinders. They will be approved ICC cylinders of 100-lb. capacity and 20-lb. cash-and-carry bottles.

The Weatherhead Co., one of the world's largest manufacturers of tube fittings and flexible hose assemblies, has for the past two years also become one of the largest manufacturers of equipment for the liquefied petroleum gas industry.

The main plant is located at Cleveland, with branch plants at Angola and Columbia City, Ind., and St. Thomas, Ontario, Canada. The company has an employe list of more than 4500. The product line embraces 25 major classifications of essential parts for 15 different industries, with Weatherhead parts on every make of passenger car and aircraft.

Albert J. Weatherhead, Jr., president, founded the company in Cleveland 25 years ago.

A designing engineer by profession, he developed and invented many of the patented products on which the

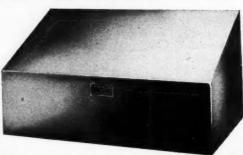
OXFORD BOTTLED GAS

for Long and Satisfactory Service

(Right) Dual Hood Type

(Below) Full Size Cabinet





Thousands of Oxford Bottled Gas Cabinets, Full Size, Single Hood and Dual Hood Types are in use in many parts of the country, giving highly satisfactory service. Constructed of heavy metal with a protective coating of paint or galvanized to insure | - always accesrust resistance, cylinders, valves, regulators, etc., are safely guarded from accidents or weather.

Write for prices and details.

THE OXFORD COMPANY, OXFORD, PA.

OXFORD LIQUID **PROPANE** VAPORIZER

Designed for bulk plant installations. Insures vaporized gas in any degree of cold weather. Outstanding superiority is that it is installed OUT-SIDE the tank sible. Write for

3

OUTSTANDING LINES

Distributed from one dependable southwestern center

REGO: HACKNEY TAYLOR

DISTRIBUTORS FOR

The BASTIAN-BLESSING Company

 $K_{EG}O$

LP GAS EQUIPMENT

PRESSED STEEL TANK

Hackney

BUTANE-PROPANE CYLINDERS

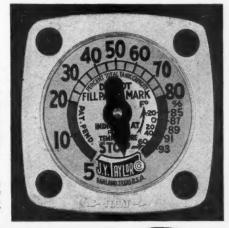
TAYLOR VISIBLE GAGES

TAYLOR is the BETTER post-war gage with the easy-to-read dial . . . plexiglas . . . accurate, rigid mechanism . . . non-corrosive.



When a tank is equipped with a Taylor qage there's no uncertainty, no quesswork. Install TAYLOR and forget gage troubles for years to come.

We are exclusive national distributors for Taylor Gages. Write for circular and price list.



GAS EQUIPMENT COMPANY, Inc.





success of the company has been built.

Homer E. Kirkpatrick, a mechanical engineer of Baton Rouge, La., and well known to many Houma business men, has been named general manager of the new operation at Houma and will be in charge of manufacture and sales. He has been in charge of Southern LP-Gas sales for the Weatherhead Co. since June, 1946.

Company Opens Texas Offices

The Butane Gas Systems has opened new sales offices in Holland, Texas, with R. P. Bray, of McGregor, as local manager.

A complete line of butane gas systems and appliances is carried.

L. C. Parker Returns to Louisiana Dealers Association

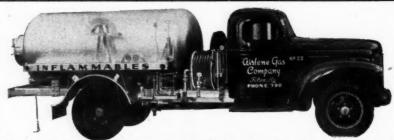


L. C. PARKER

Word has been received that L.C. Parker, for several years executive secretary of, and attorney for, the Louisiana Butane Dealers Association, has returned to that position after having served four years on the Louisiana Lique-

fied Petroleum Gas Commission.

Mr. Parker's mailing address is P.O. Box 1667, and his office address is 409 Reymond Bldg., Baton Rouge.



Shown is newly installed semi-hydraulic Ace Hose Reel on Airlene Gas Company delivery truck.

This is one of six trucks equipped with Ace Hose Reels.

ACE LP-GAS HOSE REELS

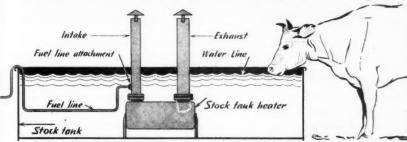
are available in several models and sizes. Butane and propane dealers throughout the country are finding Ace Reels save hose, speed deliveries, increase safety.

The hose reel shown above is a semihydraulic, fully automatic reel capable of winding 50 to 75 feet of one-inch hose. Other types include: hand crank,

air driven and spring operated models. High pressure Chiksan swing joints used in reels are approved by Liquefied Petroleum Gas Underwriters.

ACE HOSE REEL CO. 5435 Alhambra Avenue Los Angeles 32, California

Available Now -For IMMEDIATE Delivery



"IRON MAN" STOCK-TANK HEATER

Develop your agricultural trade while cold weather is still here! The "Iron Man" Stock Tank Heater was developed to help keep feeder stock from losing weight during cold weather by maintaining warm drinking water in all sizes and types of stock tanks. Immersion type, constructed of cast-iron, it "stays put" under water. Keeps water warm in any degree weather on only five gallons of Butane-Propane per 103 hours of operation. Complete with flue caps and two lighting rods, and guaranteed against mechanical or material defects.

HART-MUN FLOOR FURNACES

Designed for natural gas, liquefied petroleum gas, mixed gases and manufactured gas, famous Hart-Mun Gravity Floor Furnaces are universally accepted for their ease of installation and maximum efficiency. Manually or automatically controlled, available in 40,000 B.T.U. and 55,000 B.T.U. input, the Hart-Mun will meet with ready acceptance with your customers.

TROPIC SPACE HEATERS

These 12,000 B.T.U. heaters offer many SALEABLE advantages:

- Console-Type Cabinet with Inner Baffle
 Highest Quality Enamel Finish
 Your Choice of 3 Distinct Color Combinations— Maroon on Black, Blue on Black, White on Black

All Equipment Guaranteed Against Mechanical or Material Defects.

No Order Too Big or Too Small!

IMMEDIATE DELIVERY ON ALL ITEMS

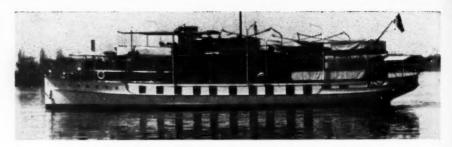
FEDERAL BUTANE SUPPLY CO.

Wholesale Suppliers of LPG Equipment

McBirney Building

TULSA 3. OKLA.

Phone 2-8026



The U.S.S. Sequoia, Secretary of Navy James V. Forrestal's yacht.

Navy Secretary's Yacht Has LP-Gas Rangettes

Two Roper rangettes operated with liquefied petroleum gas, are standard equipment on the U.S.S. Sequoia, the yacht of Secretary of the Navy James V. Forrestal.

The ship is kept in readiness to raise anchor at any time orders are

received from the Secretary of the Navy. A crew of 20 to 30 officers and men always are standing by. The crew's three meals a day are prepared on the Roper units as well as food for frequent special functions.

It is of interest to note that the high standards required by the Navy in purchasing cooking equipment are met by liquefied petroleum gas ranges.



PROPANE TRANSPORT

Typical Propane Transport Unit built for Gas Heat Inc. of Salem, Oregon. For information concerning transport units or delivery units of any size, using either cylindrical or spherical tanks,

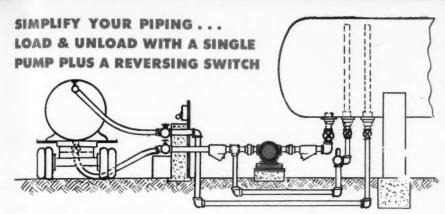
Call or Write

SUPERIOR TANK & CONSTRUCTION CO.

6155 So. Eastern Ave.

AN. 4157

Los Angeles, California



SMITH BUTANE-PROPANE PUMPS may be operated in either direction of rotation. The above sketch shows a successful bulk plant with simplified piping and fast delivery in both directions, using a single M-3 Smith pump with 3'' pipe lines, and direct-connected $7\frac{1}{2}$ HP, explo-

sion-proof electric motor with reversing switch. All valves and electrical connections are protected from truck traffic by concrete wall and steel guard posts. For speed, safety, and simplicity.

Write for full information regarding Smith Butane-Propane Pumps — well worth your special consideration.

Model T Truck Pumps for direct connecting to truck power take-off.

T - 1044, Capacity 20 GPM at 500 RPM shaft speed.

T-2, Capacity 50 GPM at 500 RPM shaft speed.

T-3, Capacity 100 GPM at 500 RPM shaft speed.

Model M Pumps direct connected to explosion-proof electric motor.

M-1044, Capacity 20 GPM at 1800 RPM, 1½ HP motor.

M-2, Capacity 50 GPM at 1800 RPM, 3 or 5 HP motor.

M-3, Capacity 100 GPM at 1800 RPM, 5 or 7½ HP motor.



MODEL M - 3

SMITH PRODUCTS COMPANY

1135 MISSION STREET . SOUTH PASADENA . CALIFORNIA . PHONE PYRAMID 12293

POWER

Oil Drillers Want Service-And Get It!

NOT long ago, after it had rained intermittently for four days, a heavy oil-field service truck of Reynolds Sales Co., butane dealer of Sinton, Texas, started out to deliver a load of butane to the site of a "wildcat" oil well, eight miles off the main highway. Nearly three miles of the eight was a temporary road cut across the mesquite-covered plain. The new road was rough even in dry weather.

R. R. Reynolds, head of the company, knew this road and he felt certain that the truck could not make it. Yet he sent his driver on the way and told him to go as far

as he could, and when he stuck to wait for the drilling crew to bring out the "cat" to tow the truck on to the site. In the meantime, Mr. Reynolds had contacted the drilling contractor's field office and asked him to send out the tractor to meet the truck.

That is one example of how the Reynolds organization has built oil-field butane business by rendering service under all conditions. The aid of powerful tractors often is needed to get the company's trucks to wildcat well sites. But the more adverse the circumstances encountered in delivering gas to the well,

Typical Reynolds delivery truck and (right) skid tank such as is used in the oil field.



By RUEL McDANIEL

the more the driller and the contractor appreciate the service—and the more business accrues to the Reynolds organization.

The company has been in business about 10 years, the greater part of this time in Sinton. Mr. Reynolds has been actively assisted by Mrs. Reynolds from the inception of the business. The company regularly covers seven south Texas counties, and there is some oil well drilling in all seven of these counties.

Butane gas is especially practical in drilling wildcat wells, because they are, in many cases, located far from proven oil fields and frequently there is no other source of fuel or power in the vicinity. After a field has been established, it is likely that natural gas is available for further drilling; but that is not generally the case with wildcats.

Obtaining water usually is a major problem confronting the average wildcat driller; and butane power is even more practical in cases where water is scarce, because butane power does not require as much water as some other forms of power.

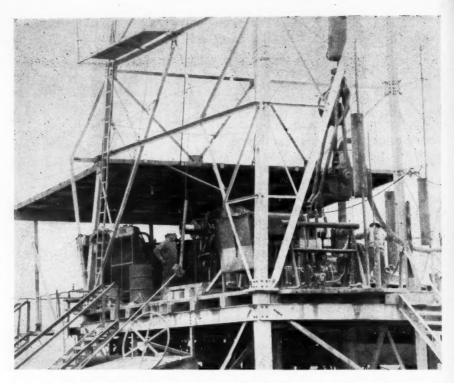
Butane is used as fuel for running the drilling rig at the well; it is used to power the water pump, a vital unit in the drilling outfit, and it may be utilized to operate the many other auxiliary units used at an oil well.

The Reynolds organization supplies every service needed in connection with the use of butane for oil well drilling, including the necessary conversions of equipment for burning butane. This is important, this company finds, in building a profitable gas business with the drilling outfits.

The company carries the necessary heat exchangers and special butane carburetors in stock for use in converting either a gasoline or diesel engine to the use of butane. The

Part of facilities of Reynolds Salcs Co., Linton, Texas.





Power plant of a typical wildcat oil well. The diesels shown are butane burners.

company either furnishes these units on a rental basis or it sells them outright, as the owner of the equipment prefers. A Reynolds man takes care of all the work of converting the engines to butane use, at no charge if the drilling rig uses Reynolds gas.

Although the company will sell the gas tank used on a drilling site to the drilling concern if it wishes to buy, the Reynolds organization furnishes the tanks if the customers wish, since the drilling outfit may have no further use for the tank in that section of the country after the well is completed. Occasionally a drilling concern buys its own tanks, but most customers prefer to borrow the Reynolds tanks and eliminate the trouble and cost of moving from one drilling site to another, or disposal if they move to another part of the state for further operations.

Tanks used for furnishing drilling rigs run in capacity from 2000 to as large as 3500 gallons, the actual size depending upon the size

ENSIGN CARBURETION BUTANE

Where Performance Counts

ENSIGN equipped trucks are today doing the toughest jobs. Getting there faster with the biggest pay loads at the least expense.

Results reported from thousands of ENSIGN installations in all parts of the country prove the practicability of Butane-Propane as an engine fuel-lower fuel costs. greatly reduced oil consumption and reduced engine maintenance.

ENSIGN, carburetor builders for over 36 years, offers a complete line of high-quality carburetion for every engine need. ENSIGN equipment sold and installed by qualified Ensign dealers is your assurance of economical and satisfactory performance on Butane-Propane.

CARBURETORS FOR BUTANE OR COMBINATION BUTANE and GASOLINE

ENSIGN

CARBURETOR COMPANY

7010 S. Alameda St., Huntington Park, California

Branch Factory: 2330 W. 58th St., Chicago 36, Illinois

Write us for complete information. Our engineering staff is at your service.

FEBRUARY - 1947

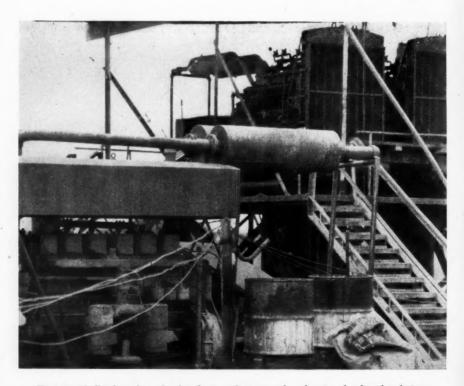
of the drilling rig and the location of the rig in relation to service.

The Reynolds Sales Co. operates three of its eight service trucks exclusively for serving the oil fields. The tanks on these three trucks hold from 900 to as much as 1500 gallons.

Although the "jack-knife" drilling rig is more ideally suited for the use of butane gas, the larger standard rigs also are utilizing Reynolds service in growing numbers. A jack-knife is a smaller, semi-portable drilling outfit and generally is used for drilling com-

paratively shallow wells and for cleaning out old wells which have ceased to flow. The small rigs need gas storage capacity of around 3000 gallons, it has been found; whereas the big standard rigs need as much as 9000 gallon capacity, especially if they are so located that it is impractical to service the tanks daily. Naturally this stepped-up capacity is possible by the use of multiple tanks.

The three oil field service trucks operate on regular, specified routes, the routes naturally being altered to eliminate wells which have been



Close up of diesel engine, showing heat exchanger and carburetor for burning butane.



SET THE PACE EVERYWHERE!

GET READY NOW

FOR SUMMER FUEL LOADS

Sell Algas farm tractor and truck conversions.



TRACTORS

TRUCKS

There is Algas equipment for every installation in most engines.

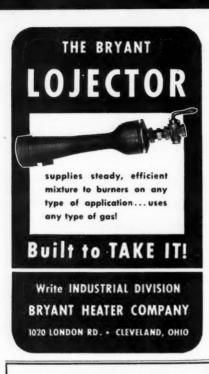
Write for special bulletin TR-1, listing recommendations for most farm tractors, and bulletin CER-2 for recommendations on truck, auto and stationary engines.

> 1109 South Santa Fe Avenue Los Angeles, California



LIQUID GAS CORPORATION

Los Angeles Chicago



INCREASED POWER!



Our dealers are reporting tremendous increases in both power and mileage after "Bu-Powering" their automotive conversions.

An installation on your own truck will prove the advantages of this special intake manifold on LP-Gas conversions.

Ellis Manifold Co.
1708 S. Soto Street, Los Angeles 23, Calif.

abandoned and to take in new locations. Many of the wells are serviced every day.

In every case, the company keeps three or four days' supply of gas on hand at each location in the event of bad weather or some emergencies which might prevent the company's trucks from reaching the site when expected. All oil field customers are instructed to call the company in case of breakdowns or other conditions which cause shutdowns and the resultant light use of gas, so that the service men will not make unnecessary trips to the shutdown wells on their regular rounds

Gives 24-Hour Service

The Reynolds organization is available for emergency 24 hours a day, and if a drilling rig should run out of gas, regardless of whose fault it may be, at midnight, a Reynolds truck would immediately head for the site with a tank of gas. The company finds this emergency service of vital importance in maintaining good will among drillers. The emergency service extends to any part of the equipment which has to do with the use of butane, such as the carburetors and heat exchangers.

When a well is abandoned, or it is brought in and other power is adapted for use in operating the well (if it is a pumper), the Reynolds men go out, dismantle the special butane equipment used on the engine and haul the tank back to Sinton, or transfer it to another location which is to use Reynolds

TATTERSFIELD BUTANE

PROPANE MANIFOLDS



For & MERCURY
Trucks and Buses

NOW AVAILABLE

Illustrated is Ford and Mercury butane manifold. It is designed to give equal distribution of fuel; is extremely cold, as it should be for butane-propane use. It gives at least 20% increase in power.

BU-SEAL Compound offers a safe, sure defense against leaks. A modern, new type sealing compound for LP-Gas valves and fifthings. BU-SEAL should be a "must" on every dealer's bench. If you haven't used BU-SEAL, order some today!

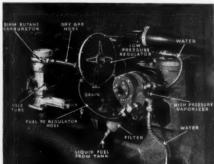


Electric and Carburetor Engineering Co.

2323 E. 8th St.

"Pioneers of the Butane Industry" Los Angeles 21, Calif.

SAVE ON FUEL & UPKEEP BUTANE CARBURETION



DEALERS . WRITE FOR FULL PARTICULARS

FASTER ACCELERATION
INSTANT STARTING
ECONOMICAL

MORE POWER

HUNDREDS OF INSTALLATIONS FROM AUTOS, TRUCKS, STATIONARY ENGINES TO CON-VERTED DIESELS. PROVEN FOR MANY YEARS.

BEAM PRODUCTS

Manufacturing Company
1206 E. 6TH ST. LOS ANGELES 21. CALIF.

MAKERS OF TWIN-BALL' SAFETY CONTROL

butane. Naturally many of the drilling outfits continue to operate in the vicinity and it is only a matter of shifting the equipment and tanks from one location to another. In any case, however, Reynolds men take care of the butane equipment and relieve the customer of the trouble and responsibility.

Reputation Carries Far

As a result of building a reputation for reliability in serving the oil fields in the Sinton territory, Reynolds service is known throughout south Texas and in some cases the service has been extended beyond the seven-county regular territory in order to take care of old customers who have moved operations into new districts.

Coast Butane Gas Co. Opens Branch in Gulfport, Miss.

Coast Butane Gas Co., Pascagoula, Miss., has opened a new branch at Gulfport, Miss., according to a recent announcement of S. J. Russell, coowner of the company with A. N. Tims.

The company has two bulk plants in Pascagoula with a total capacity of 44,000 gallons.

Central Butane Moves into New Arkansas Quarters

The Central Butane Gas Co., Inc., of which J. S. Moseley Jr. and J. C. George are the owners, has moved into its new location at 109 West Washington Ave., North Little Rock, Ark.



BUTANE-PROPANE CONVERTERS

have the Largest Horse Power Capacity for the Smallest Sized Unit; light weight castings having great tensile strength and with the least cost of maintenance.

Manufacturers of carburetors (Butane Combination, Butane-Gasoline and Natural Gas) Atmospheric Regulators and Strainers, 20 YEARS Satsifactory Service.



UNITS FOR:

- Trucks
- Tractors
- Oilfield
- Other Stationary Engines

CENTURY GAS EQUIPMENT CO.

11188 Long Beach Blvd.

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Announcing!

Immediate Delivery On 45,000 and 55,000 B.T.U. AGA Approved L.P.G.



CONSTRUCTION

l6 gauge pressed steel 24"x24" grill, welded corners, baked-on brown finish. Heavy 26 gauge galvanized steel outside shell with double lip on top. 24 gauge removable inside shell. Pittsburgh seams—practically water tight. Approximate weight 155 lbs.

BURNER & COMBUSTION CHAMBER

Economical air cooled burner—16 gauge black steel sheet combustion chamber, electrically welded. Both positively guaranteed for life of furnace, replaceable by SHAW BURNER CO., INC., to the dealer.

CONTROLS

Furnished either manually operated or with Minneapolis-Honeywell Automatic Controlswith 100% cutoff on main burner and pilot. Also supplied with White Rogers, Sampsel and General controls. Either Natural Gas or L.P.G.

Manufactured by

Shaw Burner Company, Inc.

P.O. Box 203 Phone 2274

Arkansas City, Kansas

Potential Market For Appliances

BY CHARLES O. RUSSELL

President, Liquefied Petroleum Gas Assn. and President, Thermogas Co., Des Moines, Iowa

THE subject of the potential market* for LP-Gas appliances is one to which I presume many of you have given

considerable study.

First, let us take a look at the market we are talking about for LP-Gas appliances. We are talking about the small town, suburban and rural area. The LP-Gas industry is not intended



CHAS. O. RUSSELL

to be a competitor of the gas utility, but wants to help the gas utilities spread the gospel of: "If heat will do it, gas will do it best." For purposes of this discussion, we will not include those gas utilities that are using LP-Gas in their central distribution systems, but deal only with individual LP-Gas systems at domestic consumers.

The small town-rural area then

^{*} A speech delivered Dec. 4 before the Gas Range division of the Institute of Cooking and Heating Appliance Manufacturers' Convention, Cincinnati, Ohio.

THIS BROILERCUE* FEATURE ALONE SELLS MORE FLORENCE Registered LP-GAS RANGES!

It's only once in a blue moon that an LP-Gas Range contains a feature so outstanding that it clinches sales all by itself. But that's the kind of feature the new Swing-Out Florence Broilercue* is! In fact, the new Florence "Registered" Gas Range is NEW DESIGN all the way through—with one sales-making feature after another! Sell the Florence line—and you sell the LP-Gas Ranges women want.

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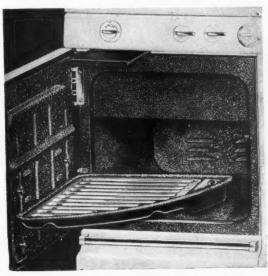
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*Patents applied for





ONLY FLORENCE OFFERS FOCUSED HEAT

As shown at right, the Florence Broilercue has an exclusively designed arched roof which concentrates penetrating, radiant heat evenly over entire broiling surface for superior cooking results.



Completely New Streamlined Turret-Top
Design ☆ 2-Oven Convenience ☆ Exclusive New Swing-Out Broilercue ☆ Famous Florence Baking Oven ☆ Easily Serviced from the Top ☆ New C-Quik Gas
Cock Handles ☆ New DeLuxe Top Light,
Combination Telechron Electric Clock
and Time Reminder, Utility Qutlet.



FLORENCE STOVE COMPANY... General Sales Offices and Plant: Gardner, Mass. Western Sales Offices and Plant: Kankakee, III. Southern Plant: Lewisburg, Tenn. Other Sales Offices: One Park Avenue, N.Y.; 1459 Merchandise Mart, Chicago; 53 Alabama Street, S. W., Atlanta; 301 No. Market Street, Dallas,

is our market. According to the United States Bureau of Census about 43% of the families in this country live in this area; about 20% in rural non-farm sections, about 20% in rural farm areas and just under 10% in small towns under 10,000. Just under 60% of United States single family dwellings, almost half of the owner-occupied dwellings and about 55% of the new houses built within the last 12 years, are located in this area.

Let us then take a look at where the LP-Gas industry stands as of today in order that we might better look into the future markets.

According to information submitted by appliance and equipment manufacturers, trade associations, and suppliers, there are now between three and four million homes using liquefied petroleum gas.

The estimated average investment of home owners in household appliances using liquefied gas is \$250 per home. The investment in these appliances in three million homes in the United States is. therefore, approximately \$750,000,-000. One of every eight gas cook stoves in use in the United States is now burning liquefied petroleum gas.

The investment of the distributors and wholesalers of liquefied gas in dispensing cylinders, tanks, trucks, storage plants and other



above and below ground systems.

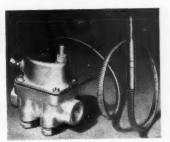
- LP-GAS CYLINDER VALVES are listed as Standard and for re-examination service by Underwriters' Laboratories, Inc.
- * GLOBE, LINE AND ANGLE VALVES Diaphragm Packless and Wing Cap - in Flare sizes from 1/4" to 5/8" O.D.; Sweat sizes from 1/4" to 21/8" O.D.; F.P.T. sizes from 1/2" to 2".
- * SIGHT GLASSES, suitable for any normal LP-Gas pressure. Entire top assembly removable while soldering lines to body.
- → FLARE FITTINGS, including Unions, Couplings, Adapters, Elbows, Tees and Nuts - listed as Standard by Underwriters' Laboratories, Inc.

SUPERIOR

VALVE & FITTINGS COMPANY

PITTSBURGH 26, PENNSYLVANIA

New MR-2 SAFETY THERMOVALVE



THIS new electro magnetic thermovalve assures unfailing safety in gas control applications. Used on space and unit heaters, central and floor furnaces, water and range heaters, hot water and steam boilers. Handles manufactured, natural or LP-Gases.

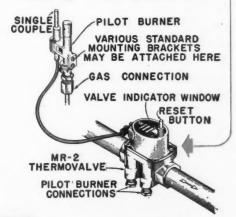
On the installation diagram, the new MR-2 valve and the new 26-R Pilot Burner are used for out-pilot safety control. No outside current is required. Valve holds open until released by pilot-flame failure. 100% gas shut-off will be maintained until pilot light is reignited and valve manually reset by push button.

For further information, contact your nearest factory branch or distributor, or write for Catalog 52-B and Manual FI-101.

Check these outstanding features:

- Streamlined design.
- High-flow capacities.
- Visual valve position indicator.
- Design simplicity.
- Sealed electro magnetic assembly.
- Heavy duty 5/16 round thermocouple.
- Flexible armored cable leads.

MR-2 INSTALLATION



GENERAL 801 ALLEN AVENUE



CONTROLS
GLENDALE 1, CALIF. 4-1

FACTORY BRANCHES: Philadelphia, Atlanta, Boston, Chicago, Dallas, Kansas City, New York, Denver, Detroit, Cleveland, Pittsburgh, Houston, Seattle, San Francisco. Distributors in Principal Cities.

equipment is estimated at \$100 per home installation. Therefore, the investment in distribution and servicing facilities in the industry used for serving homes is approximately \$300,000,000. In most cases the wholesalers and distributors are small independent businessmen.

We see from this, then, that the LP-Gas industry is of considerable size despite its youth. It is 20 years old and has a 2000-time expansion record during those 20 years. The industry in the early years had many problems, including production, distribution, transportation, storage, etc., and had to await solution in the form of proper equipment, household appliances, advanced selling, distribution and marketing techniques. It has now

passed the "hit-or-miss" stage, and LP-Gas merchandising is a strong industry with tremendous possibilities.

It is interesting to note that in 1937, a leader in the industry, R. W. Thomas, made the bold prediction that 100,000 new LP-Gas customers would be added each year for the next five years. There were then 400,000 customers. This was considered a wild prediction for the time, but history presents us with an average in excess of twice that number during the last eight years.

Having hit the highlights of the past and present, what, then, can we guess as to the future.

It has been estimated that there are some 16 million, plus, dwellings that are beyond the service of gas

Butane - Propane Heaters



IMMEDIATE DELIVERY

Four Models: From 12,000 to 25,000

AVAILABLE NOW
One and Two Burner

Hot Plates for LP-Gas

Write—Wire—Phone:

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Monterey Park, Calif.

Phone: CU 3-2666



At McNamar large Storage Tanks of 18,000 gallon and 30,000 gallon capacities are made according to the U-69 ASME Code of Construction. All vessels are subject to the approval of the National Board of Boiler Inspectors.

Write for Booklet "LP-Gas Data."

McNamar Boiler & Tank Co.

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Tulsa. Okla.

utilities. Three million of these are now using LP-Gas, leaving a potential of 13 million homes.

In addition we must take a look at the number of homes expected to be built during the next three to five years, which has been estimated at 5 million homes. A reliable survey shows in excess of 80% of these homes will be built beyond the gas mains, the trend for several years having been to build in suburban areas and out in the open spaces. Eighty percent of 5 million creates a potential market of 4 million.

To the current non-gas user potential of 13 million, plus four million, or seventeen million, must be added the replacement market for appliances. As a conservative esti-

mate on ranges this can be set at 10%. Factors since 1941 would tend to make this replacement percentage too low, as many present users have been forced to convert old natural gas or manufactured gas ranges to LP-Gas, and the so-called "victory" model ranges sold during the war can for the most part be replaced. But from our present 3 million users we can expect, then, an annual replacement market of 300,000 appliances. If we are after a 5-year look ahead, this would be 1,500,000 ranges. Thirteen million plus 4 million plus 1,500,000 equals a potential of 18,500,000.

Admitting that it is impossible to convince all of these homes that they should use LP-Gas and buy LP-Gas appliances, take any per-



SAFETY

• EXTRA HEAVY BRASS BODY AND CAP WITHSTANDS HARD USAGE

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le

- SAFETY RELIEF DESIGN ELIMINATES POSSIBILITY OF PREMATURE DISCHARGE
- LIFE-LONG SOLDER SEAL ON SAFETY CAP MAINTAINS ACCURATE FACTORY SETTING
- HIGHEST QUALITY MATERIALS . . . ACCURATE WORKMANSHIP

A smooth operating faster filling reliable valve is not enough. Tested and approved safety features must also be incorporated. The Schoenberger valve has all these features.

These safety features stand guard through the long years of valve usage. They are content to play a watchful minor role to a star performer. But if ever an emergency, they take instant command and control safely.

These are the hidden, extra but necessary qualities you receive when you specify Schoenberger. These are why every Schoenberger valve is stamped with Underwriter Laboratory approval. Quality and protection—safe and sound—Schoenberger.



Write for free Bulletin P.B. 11 which gives complete details.

THE W. J. SCHOENBERGER CO.

8810 HARVARD AVENUE

CLEVELAND 5, OHIO

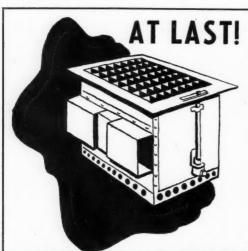
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centage you feel inclined to accept. For instance, 50% would be 9,250,-000, and if you are pessimistic and adopt 10%, that still represents 1,850,000.

In the year 1941, over 500,000 new users were added to LP-Gas service. It is reasonable to assume that had it not been for the war, at least that many per year would have been added each of the 4 war years, which represents 2 million that it is anticipated can be sold as fast as appliances and equipment are available. This pent-up demand is slowly being met.

At present our market is less than 20% saturated, and there is no reason to believe the LP-Gas industry will be any different than any other American industry in the field of basic economic marketing. The pioneering stage has been passed; there is ready acceptance of our product and the volume sales market between 20% and 60% saturation lies just ahead. The industry is prepared to meet this market with well thought out plans.

The thousands of LP-Gas and appliance outlets have a dual interest in their prospects. They have the initial appliance profit and the repeat and pyramiding profits from the LP-Gas. For this combined reason they make very enthusiastic salesmen for LP-Gas appliances. Likewise, the gas load feature will encourage automatic water heaters, refrigerators, and other gas appliances in volumes far in excess of pre-war levels.



A floor furnace built especially for trailers. Adaptable to small rooms, cabins and bathrooms. Size 10" by 14" by 10" deep. Abundant heat—extra space—no wall sweating.

Distributed East of the Rocky Mountains by

Anco Manufacturing & Supply Co.

Atlas Life Building Tulsa, Okla.

UTILITY SUPPLY COMPANY

P. O. BOX 365—FRESNO, CALIFORNIA Exclusively Wholesale for LPG Dealers

SPEED EFFICIENCY CAPACITY SAFETY



for PLUMBERS

Ransome Plumbers Furnace, Model P-3, operates on either Butane or Propane, lights with a match, requires no pumping of pressure, wastes no time generating. Stays lighted regardless of draft conditions. Emits no smoke, soot, or offensive odors. Will reduce a pot of lead to the molten state in 5 minutes. This outfit appeals to progressive plumbers who want to please their customers, as well as reduce their own labor costs. Write for descriptive folder and prices.

RANSOME COMPANY

Designing and Constructing Engineers
4030 HOLLIS STREET • EMERYVILLE, CALIFORNIA

Ransome

WARREN

LIQUEFIED PETROLEUM

GAS

BE ALERT FOR TODAY-READY FOR TOMORROW

WARREN PETROLEUM CORPORATION

TULSA, OKLAHOMA

Detroit

Mobile

Houston

Illinois Distributors Form Association

SEVENTY-ONE marketers of liquefied petroleum gas in Illinois met in Decatur, Jan. 15 to complete the organization of a state association. Two preceding meetings had been held to consider and write by-laws, determine policies and nominate officers. Elected to office for the ensuing year are:

E. E. Rapp, Pur-O-Pane Gas, Sparta, president.

Walter H. Miller, Illinois Bottled Gas, vice president.

R. E. Weilbacher, Columbus, secretary and treasurer.

Directors are:

Tom E. Ennett, Rockford Propane Co., Rockford, director from the Northern District.

A. J. Woelfle, Illinois Butane Gas & Equipment Co., Bloomington, director from the Central District.

Thornton Casey, Butane Sales & Service, Centralia, director from the Southern District.

Harold I. Silverman, Salem Central Transportation Co., Inc., Salem, director at large.

H. C. Lewis, Metropolis, director at large.

Seek Protective Legislation

The primary objectives of the association are to establish better contacts among distributors and dealers for the purpose of procuring better safety



Ralph Beisner

new co-owners of LINCOLN

Manufacturing Co.



William Harvick

Fabricators of Butane and Propane Tank

Spheres or Cylindrical Type Transports —Storage — Mobile

"Built to Your Satisfaction" Under API-ASME and ASME Codes

LINCOLN MANUFACTURING COMPANY

8680 Otis Street

Southgate, California

Phone LUcas 7181

lows

measures and, if possible, legislation on safety within the state.

Originally the set-up provided that an active member (one having voting privileges) would include an individual or corporation actively engaged in the sale, either retail or wholesale, of liquefied petroleum gas products as the major part of his business, but in the final adoption of the by-laws this was changed so that an active member can be only one who has a bulk plant or who maintains tank transport equipment of a minimum of 1000 water gallons capacity.

1947 National Electric Code Is Handbook for Installers

The National Fire Protection Association has just published the 1947 edition of the National Electrical Code, which is the "Bible of the electrical industry" and the safety blueprint which protects even the simplest electrical installation.

Presented for the first time in conveniently bound desk reference size, uniform with the other four volumes of the National Fire Codes also published by the NFPA, the 1947 National Electrical Code is a book that almost anyone using electricity commercially would like to know about.

The 1947 edition is a collection of rules governing the installation, and to a certain extent, the use of electrical equipment. Its purpose is to reduce the hazard from electrical fires and electrical accidents and it does this by specifying the exact manner in which electrical materials, devices, fittings and appliances shall be both installed and maintained.



IMPROVE
YOUR PRODUCT

many leading tank **builders** choose SELWYN LANDERS L.P.G. equipment LET US QUOTE ON

YOUR REQUIREMENTS

Selwyn-Landers Combination Outage and Pressure Gauge Assembly No. 45-B for both ¾" male pipe tank connection and ¼" female connection. Consists of stainless steel needle valve, pressure gauge, outage valve and STOP FILLING warning dial.

OTHER SELWYN - LANDERS PRODUCTS

ROTARY GAUGES
RELIEF VALVES
FILLER VALVES
P.O.L. PIGTAILS
ADAPTERS

FIXED LIQUID LEVEL GAUGES VAPOR RETURN VALVES CYLINDER VALVES SLIP TUBE GAUGES L. P. G. REGULATORS

SELWYN-LANDERS CO.

4700 EAST WASHINGTON BLVD. LOS ANGELES 22, CALIFORNIA

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NEW PRODUCTS



Propane Spheres

Buehler Tank and Welding Works, 5000 Pacific Blvd., Los Angeles 11.

Description: This new 34" propane sphere supplements the Buehler line of LP-Gas spheres, tanks and cylinders. The 34" sphere has a gross or water capacity of 86 gallons and a net capacity for propane of 75 gallons.

From fine quality steel, two deep hemispheres are drawn. With high capacity automatic welders the two halves are welded together, meeting fully the requirements of API-ASME and ASME codes. A primer coat of zinc chromate is used before the final aluminum painting to assure long life and good appearance.

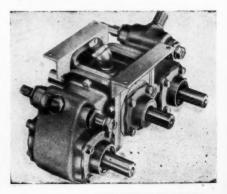
The new Buehler spheres are fitted with magnetic gages. Both top guard and bottom skirt of a heavy gage material are provided with a smooth rolled edge for extra strength and to facilitate easy handling. Top guard, which is painted green, typical of all Buehler tanks, is large enough in diameter to provide space for regulator.

Power Divider

H. S. Watson Co., 1145 Harrison, San Francisco.

Description: A new item of truck equipment is a power divider and has been especially built to simplify driving of two independent pumps on tank trucks distributing fuel oil or other petroleum products. Pumps can be operated simultaneously or independently as required. It is also available with a third shaft extension for driving of hose reels or other equipment.

The Watson Divider is available in various speed combinations to drive practically any pump at its correct speed without racing or lugging the engine. The power divider is direct driven by a needle-bearing shaft from



a power take-off mounted on the truck's transmission.

Data covering ratios, horsepower and installation is now available in convenient printed form, according to the manufacturer.

Fire Extinguisher

American-LaFrance-Foamite Corp., Elmira, New York.

Model: Alfite Speedex.

Description: A new, midget fire extinquisher, only 3-9/16 in. diameter and an overall length of 22 inches, is now in production.

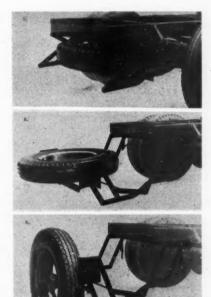
The contents, Speedex carbon dioxide gas, weigh only 3% lbs, but expand upon release to 450 times their contained volume. This gas, a non-conductor of electricity, is non-poisonous, non-corrosive and odorless. The Speedex will not freeze at any climatic temperature, is heavier than air and will not support combustion.

Application: The extinguisher is suitable for extinguishment of small oil or grease fires. According to the manufacturer, it has its place in the electrical and industrial plant, the office, motorboat, garage, truck, automobile and home.



Its rating by the Underwriters' Laboratories indicates that two such extinguishers make one unit of first aid fire protection for use on Class "B" fires (flammable liquids, greases, etc.) or Class "C" fires (electrical equipment).

It is shipped fully charged with wall hangar, screws and record tag.



Truck Tire Carrier

T. E. D. Corp., 928 S. Flower St., Los Angeles 15.

Description: This new tire carrier makes the changing of truck tires and wheels a one-man job. It eliminates lifting the heavy wheels, even when raising them to an upright position.

The illustrations show the tire and wheel securely clamped under bare truck chassis, carrier extended so tire clears body of truck and carrier cradle tilted so tire rests on ground ready to be detached and rolled away.

The carrier, constructed to withstand a load stress equal to four times the load it carries under normal use, is bolted to the chassis frame of truck, trailer or bus either at the rear or side. The two models have a weight of 72 pounds and 93 pounds.

Controls Catalog

"Automatic Controls" is a 52-page catalog, pictorially illustrating General Controls Co.'s complete line of automatic pressure, temperature and flow controls for gas, air, oil, water, refrigerants and other fluids applicable for industrial, domestic, refrigeration and aircraft use. It gives complete engineering data and list prices of products manufactured by General Controls Co., 801 Allen Ave., Glendale, Calif., and is now available.

Water Vapor Indicator

A new water vapor indicator for accurate, rapid, and sensitive indication of water vapor content of compressed gases, and with modification of procedure for gases at or below atmospheric pressure, is announced by the American Instrument Co., Silver Spring, Maryland.

The new instrument measures water vapor content from saturation down to 0.001 milligram per liter or less, and measurements are reproducible to 0.002 milligrams of water per liter. Determinations are made in 2 to 5 minutes as compared to several hours by the gravimetric method, with an accuracy comparable to that of the gravimetric method.

By virtue of its accuracy and simplicity, the instrument can be used advantageously for the determination of water vapor content (relative humidity or moisture) in gas manu-

Hidden Ingredients

IN EVERY SHIPMENT OF SINCLAIR LP-GASES

"Honesty", "Integrity", and "Experience" are hidden ingredients that come in every shipment of SINCLAIR LP-GASES. That is why the name SINCLAIR means more to Sinclair dealers than just another label.

The test of your source of supply is the way it takes care of your requirements during the peak demand season. SINCLAIR plans its production to fill the orders of its dealers. Plan your propane purchases with SINCLAIR now.



LIQUEFIED PETROLEUM GAS DIVISION



THE L P-GAS INDUSTRY IS TiteSeal BOUND



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RADIATOR SPECIALTY COMPANY CHARLOTTE 1. NORTH CAROLINA

- O RADIATOR SPECIALTY COMPANY OF CANADA, LTD. TORONTO
- O GOLDEN STATE RUBBER MILLS, LOS ANGELES, CALIFORNIA

MONROE KOOL-KABINET GAS HEATER



- No Burned Fingers
- No Scorched Curtains
- No Blistered Woodwork

These important safety advantages of MONROE KOOL-KABINETS . . . plus the outstanding economy of MONROE GASMASTER Burners . . . the greater room warming efficiency of MONROE Warm-Flor Radiants and Patented Interiors, bring credit to the service of every L.P.G. Operator who sells MONROE HEATERS.

Full line of vented and unvented heaters especially designed and engineered for L.P.G.

MONROE STOVE CO.

Sales and General Offices: 3256 Milwaukee Ave. Chicago 18, III.

WAREHOUSE BRANCHES:

Newark, N. J. — Columbus, Ohio — Omaha, Nebr. San Francisco, Calif. Sales Office: Dallas, Texas

facture, process control, laboratory research and control, and testing or inspecting gases.

Socket Thermometer

Accuracy Scientific Instrument Co., Philadelphia, Pa.

Model: "Senior Midget."

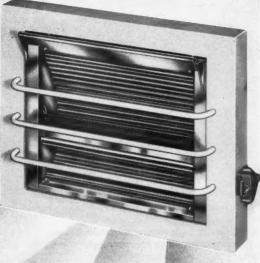
Description: This separable socket industrial thermometer eliminates the necessity of returning the thermometer to the factory for repair, and makes it possible for the maintenance man to insert a new refill stem in a few minutes. without the loss of production time.

The "Senior Midget" is available in angle and straight stem types with heavy armor protection to resist corrosion and dirt. Like every Accuracy thermometer, this one is equipped with the popular flat bore mercury stripe in a yellow column for easy reading.

Full details on this new thermometer are included in Accuracy's Bulletin 55.







Rafire WALL HEATER

New comfort for your customers is assured with the Humphrey Rafire Wall Heater. This smartly styled, efficient heater is ready on a minute's notice to supply a generous amount of pure, radiant heat. Wherever EXTRA heat is needed — for bathroom, living room, recreation room, kitchen or den — the Rafire Wall Heater is ideal for meeting this demand.

A specially designed efficient burner quickly heats the Chromel heating element to a beautiful incandescence, and a sparkling Chrome reflector radiates the heat directly into the room. The Rafire Wall Heater is of all metal construction, quality built throughout. Operates equally well upon Natural, Manufactured, and Liquefied Petroleum gases.

GENERAL GAS LIGHT COMPANY

23 WARREN ST., NEW YORK CITY

NO UNIT SANTA IL BIDG. DALLAS

225 REVINTH ST., SAN PRANCISCO



THE TRADE

The water heater division of the A. O. Smith Corp., has been moved from Milwaukee, Wis., to the company's new \$3,500,000 water heater plant at Kankakee, Ill., it has been announced by James F. Donnelly, who is in charge of the sales division.

The move includes his two assistants, Paul H. Cramp and Don D. Williams, the latter in charge of "Smithway - Burkay" water heaters for commercial establishments.

One of many interesting features in the new plant is the conveyor system. This runs completely through the plant and parts of it are fourtrack conveyors. The conveying system is capable of holding one full day's production of 1000 to 1500 water heaters.

The appointment of E. Lee Merrill as executive vice president of the Monroe Stove Co., Chicago, is announced by F. R. Wingerter, president of the firm.

Don J. Irvine was appointed sales manager and in addition, will direct all advertising and merchandising activities for the firm.

Changes in the California representation of the Blackmer Pump Co., Grand Rapids, Mich., are announced by B. L. Gordon, company president.

The California territory has been placed under the direction of Thomas L. Garland, who has been a special Blackmer representative on the West Coast since April. Mr. Garland will maintain offices at 98 Folsom St., San



The New Plant of the A. O. Smith Corp., Kankakee, Ill.



Harold Leader, vice president, Mission Appliance Corp., Los Angeles, spades the first earth from site of new Mission million dollar plant at Hawthorne, Calif. The building, of steel and concrete, will be 800 ft. long by 165 ft. wide and cover 11 acres of ground. It will contain a quality-controlled laboratory and engineering research facilities. Half a million dollars worth of new machinery will speed up future production of Mission water heaters. Building will also house the Mission subsidiary, the Ideal Heater Corp.

Francisco, and will have charge of sales of the entire line of power and hand-operated rotary pumps and strainers.

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L. L. "Dusty" Rhoades, former personnel director of Blackmer, has been named representative in charge of the Los Angeles office located at 415 S. Central Ave.

A. W. Conley has been elected president of the Coroaire Heater Corp. of Cleveland, succeeding E. R. Smead, who becomes chairman of the company's board of directors.

Mr. Conley has served Coroaire as executive vice president and general manager since its organization in 1944.

Mr. Conley announces the appointment of W. L. Thomson as engineer of the company.

Mr. Thomson is a specialist in design and production and sale of gas burning equipment.

After more than 46 years of active service with Cribben and Sexton Co., manufacturers of the "Universal" gas range, Carl E. Lyon has announced his intention to retire as vice president and director of purchases effective last Dec. 31. Mr. Lyon will continue his association with the company in an advisory capacity.

It was in August 1900 when Mr. Lyon joined Cribben and Sexton as a stockroom boy. In time he was promoted to timekeeper in the nickel shop then to head timekeeper and paymaster. Later he was made general superintendent, then vice president and director of purchases.

At a dinner given to American Meter Co.'s 25-year Service Guild members at the DeWitt Clinton hotel, Albany, N. Y. on December 4, Norton McKean, president, awarded recognition to five new members of the

IMMEDIATE DELIVERY

up to Carload lots "National Heater"

Model 101



Butane, Propane or Natural Gas

20,000 B.T.U. approved type Circulator Heater. Beautifully finished in rich crinkled brown. Steel Body, Revolutionary New Stainless Steel Burner, Weight 15 pounds; Height 18 in., Width 19 in., Depth 8 in.

List \$19.50 . . . 40% discount to Dealers . . . Distributor quotations on request.

Call or Write Sales Department

NATIONAL GAS EQUIPMENT CO.

Incorporated

TERREL, TEXAS

Phone 1083

Guild from the D. McDonald Works at Albany. The Guild in the Albany plant now has 72 members, comprising approximately 14 percent of the personnel.

The five who were the latest to qualify for the honors to which their quarter century of continuous service has entitled them are Leo Rivers, George A. Nicklas, George W. Winne, Arthur M. Manweiler and Charles C. Schlosser. Bernard J. Holtslag is senior in point of service, having joined the company in 1886.







WM. R. TELLER

The appointment of James N. Crawford and William R. Teller as vice presidents of Bryant Heater Co. is announced by Lyle C. Harvey president.

Both Mr. Crawford, formerly sales manager, and Mr. Teller, heretofore director of engineering and development, will continue work in their respective fields.

The appointments reflect the expanded operations of the company, which are utilizing an additional Cleveland plant and a new plant in Tyler, Texas.

Gas Atmospheres, Inc., 20011 West Lake Road, Cleveland, Ohio, recently organized, with A. A. Straub, as president and general manager, is special-



Continuous IMPROVEMENT

In LINE with our progressive policy in manufacturing, we expect to announce important improvements to the Ward Furnace during 1947.

Ward pioneered the floor furnace back in 1909 and is responsible for many of the features that have made the floor furnace the efficient, economical appliance it is today.

We expect to continue to remain out in front. Our engineering staff is busy and our plant facilities have been expanded so as to provide not only a better furnace in the months to come—but more of them.

For the present — shipments will continue to be made only to our longestablished dealers. However, we are looking forward to the day when we will be able to offer additional dealers the sales advantages of Ward Floor Furnaces. 38 YEARS OF "KNOW-HOW"



WARD HEATER COMPANY

1800 W. Washington Blvd. . Los Angeles 7, Calif.



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ACCEPTABLE TO Underwriter's Laboratories

No Liquid "SPILL-OVER" DURING FILLING OPERATIONS

Compact Single Riser Unit WITH DIRECT

"Head-to-Tank Contact"



UNIVERSAL'S UH-50A-1 and 2 **ABOVEGROUND**

LPG CONTROL HEAD

Supplied in Complete Assembly Kits or as a UNIT without FITTINGS

The UH-50A-I and 2, and the UH-40B-I and 2 control heads are acceptable to Underwriters' Laboratories, Inc., for use on listed liquefied petroleum gas systems where the suitability of their particular application has been determined.

UNIVERSAL UH-40B-I and 2 SERIES for Belowground Systems DE-SIGNED with INTERNAL FILLING TUBE and 21/2" (Female) Threads for the Installation on any Length TANK RISER.



BOTH SERIES designed for FILLER, VAPOR RETURN, LINE and RELIEF VALVES in .30 or .60 RELIEF AREA.

(Vent Valves and Pressure Gauges Optional.)

UNIVERSAL GAS EQUIPMENT CO.

P. O. Box 5937

Dallas 2, Texas

izing in gas atmospheres for use in metallurgical, food, paint, dye, chemical and other industries.

The scope of activities of the new organization includes the design. manufacture and sale of various types of equipment and processes to produce industrial gas atmospheres-deoxidizing, carburizing, malleablizing, inerts, nitrogen, hydrogen, dissociated ammonia.

A. R. Thomas has been appointed manager of the Shellane section of the Shell Oil Co., Inc., New York, the

company announced recently. This section handles liquefied petroleum gas for domestic use.

Born in Denver. Colo., Mr. Thomas was graduated from the University of Denver in 1934. He began his career with Shell in 1937 as a marketing train-Since then. ee.



A. R. THOMAS

he has progressed through various positions of increasing responsibility in the real estate development, lubricants and fuel oil departments.

During the war, Mr. Thomas handled Shell contracts with government agencies in Washington, D.C., until 1944, when he was transferred to the company's New York office as industrial relations representative. He held the latter position until his present appointment.

Graver Tank & Manufacturing Co., Inc., of East Chicago, Ind., and Banks Moreland, of Houston, Texas, announce that Banks Moreland's tank business, which was formerly con-



AMERICAN METERS RELIANCE REGULATORS

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Serving ...

Montana, Washington, Wyoming, Idaho, Oregon, Colorado, Utah, Nevada, California, New Mexico, Arizona.

Selwyn-Landers Products

Universal Heat - Master Floor Furnace

Gas Ranges

Superior Valves and Fittings

Propane Cylinders

Reznor Gas Unit Heaters

Brilliant Fire Space Heaters

•

Continental Water Heaters

Helco Gas Regulators

Distributors

APEX Cleaners: Washers: Ironers

POLLY Mira-Grills and Driers

for Western Nevada and also Inyo, Mono, Alpine, Sierra, Eastern Nevada, Plumas, Lassen and Modoc Counties of California

L. G. E. CORPORATION

1355 Market Street San Francisco 105 Lake Street, Reno ducted under the name Banks Moreland Co., was purchased last Oct. 1 by Graver Tank & Manufacturing Co., Inc. It will continue to operate in the Southwest as Banks Moreland Co., a division of Graver Tank & Manufacturing Co., Inc.

The new division will be under the management of Banks Moreland who has been made a vice president of Graver Tank & Manufacturing Co.





H. E. GOLDEN

ROBT. H. TAYLOR

Since the information below was released, word has been received that H. E. Golden died of a heart attack in Florida:

Harvey E. Golden has been elected vice president of the Florence Stove Co., Gardner, Mass., according to an announcement of the board of directors. Mr. Golden, formerly general sales manager, succeeds Henry H. Morse, for many years a prominent leader in the industry, who is retiring after 22 years' association with Florence.

Florence president, Robert L. Fowler, also announced that Robert H. Taylor, formerly New York division sales manager, has been appointed general sales manager to succeed Mr. Golden. George A. Quinlan, Florence representative in the Chicago area, becomes Mr. Taylor's successor as New York division sales manager.

CYLINDERS NOW!

FOR SALE

Propane Cylinders, 35 Lbs. Capacity. Complete with valve with POL connection and safety relief. Twin hook-up makes ideal domestic installation.

All Cylinders Fully Insured

Convenient Terms of Payments if Desired

Ask about our new "Package"
Bottled Gas Plant—Ideal for the
small dealer or branch plant—
small investment—greater profits

STAINLESS STEEL TANK CORP.

Chicago 3, Illinois

176 West Adams St.

Dearborn 5941

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WS

For

Butane-Propane SERVICE PEERLESS

TURBINE (VANE)

PUMPS

For High Heads and Capacities up to 150 G.P.M.



Type X T

For efficient, low cost liquefied petroleum gas services including 1 p-g bottling, tank storage, truck, tankcar transfer, etc.

Most advanced in design and construction for maximum service and dependability.

Write for Details



Peerless Pump Div.

Food Machinery Corporation

Canton 6, O. — Quincy, Ill.

Los Angeles 31, Calif.





N. H. SLOVER

D. C. SLOVER

The addition of Davis C. Slover to the sales personnel of Southern Gas & Equipment Co., Tulsa, is announced by F. P. DeLarzelere, president.

Mr. Slover, a brother of Norman H. Slover, manager of the company's operations at Enid, Okla., who was assigned western Oklahoma as sales territory at the same time, has more recently engaged in the insurance business at Lubbock, Texas. Prior to this he was for 20 years employed in the refining division of Cities Service Oil Co., in laboratory and chemical work at Okmukgee, Cushing, Ponca City, Okla., and St. Charles, La., returning to Ponca City as safety and personnel director.

Mr. Slover has been assigned the north and west Texas and Panhandle areas.

Ernest Learock, of Domestic Thermostat Co., Los Angeles, has announced the appointment of Howard Dyer as Pacific Coast sales manager. Mr. Dyer has been associated with the thermostatic control industry on the Pacific Coast for 11 years and is well known among appliance manufacturers.

Announcement is made by American Car and Foundry Co. that J. D. Seiler has been appointed assistant



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QUALITY

LPG TANKS

Custom-designed in the modern manner— It's a Lancaster tank.

With the emphasis on quality, safety, economy—and appearance—Lancaster offers the LPG dealer real value for his money. Engineering, fabrication and erection are always maintained on a high standard and in full accordance with Code requirements.

Your inquiries are cordially invited.

BULK TANKS TRUCK TANKS SKID TANKS GAS HOLDERS

LANCASTER IRON WORKS, INC.

Lancaster, Penna.



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if you are not a subscriber to

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1709 W. Eighth Street, Los Angeles 14, Calif.

SUBSCRIPTION ORDER

Enter my subscription to BUTANE-PROPANE NEWS to begin with the next issue.

1 Year \$2.00 | 3 Years \$5.00 |

Check enclosed Please send bill

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COMPANY

STREET CITY ZONE STATE

FEBRUARY - 1947

NAME

141

"We Have Used All Makes... FIND VIKINGS the BEST"



In a recent nation-wide survey, users were asked to comment on rotary pumps in use. Many fine compliments concerning the simplicity, ruggedness and dependability of Viking Rotary Pumps were received.

"Vikings extremely satisfactory on heavy work," one user reported. "Of all the pumps we have (and there are a great many) we like Viking s best," another said. "Viking is the best pump for our service. Buy nothing else," still another said. "Vikings do a wonderful job. Don't know what we would do without them," another said.

For complete information on Viking Rotary Pumps, write today for Bulletin Series

2300B. It will be sent free by return mail.

See Our VIKING
Catalog In Pump Company
SWEETS CEDAR FALLS, IOWA

works manager of the ACF Milton, Pa., plant which specializes in the building of ACF tank cars, tank car tanks, storage and pressure vessels.

Mr. Seiler has been with the company for a period of forty years.

H. R. Walker has been made vice president and director of sales of L. C. Roney, Inc., Inglewood, Calif., according to a recent announcement. He was also made a member of the board of directors.

Mr. Walker joined the Roney organization in March of last year as Southwestern distributor with head-quarters at Houston, Texas. Prior to that he was associated with the Mosher Steel Co., in charge of all sales of LP-Gas equipment.

His practical and technical experience in the LP-Gas field and his acquaintance with dealers' problems



A Winter Air Conditioner of highest efficiency. From 30,000 btu up.

THE OHIO FOUNDRY & MFG. CO. Steubenville, Ohio



The bigger they are . . .



the harder they fall!

Easy business and plenty of it is not conducive to good salesmanship nor to straight thinking, any more than a big meal improves the appetite and sharpens the wit.

A dozen or two fat orders via the transom and some short sighted companies put the brakes on selling and advertising efforts...stalling the "engine" which then gets temperamental when it is needed.

"Why advertise?" they ask. "We'll never fill the orders we've got."

And they're right!... about not filling the orders, we mean.

They'll never fill those orders because they'll never get the chance to...a good part of the "orders" they're behind on today aren't orders at all... they are "factors of safety," placed by people who want to make sure that they'll get what they want. Instead of ordering one refrigerator or one lathe, they order four, five or six of them. Delivery of one of these cancels the other orders. Ten orders shrink to two,

and by the time every manufacturer involved in filling these orders cancels his own "safety margin" of orders, those eight cancellations have multiplied themselves by ten... and the bigger they are, the harder they fall. If you want an idea of how this works, ask your purchasing agent how many orders he places to insure delivery of the one needed piece of equipment.

The executive who looks upon his advertising as a long-range builder of acceptance for his company's product and a creator of demand for his company's trade-mark... who keeps up his advertising effort... obviously will suffer less than he who has released his grip on his market.

Would you like to see a couple of case histories of what happened to companies that discontinued advertising because they were "oversold"? Would you like to have copies of this ad to send to others in your organization? Just drop a note to Associated Business Papers, 205 East 42nd Street, New York 17, N. Y.

BUTANE-PROPANE News

A MEMBER OF THE ASSOCIATED BUSINESS PAPERS



The NEW HELCO MODEL 50

L.P.G. Regulator Now In Production



Especially Designed For Cylinder Use

SPECIFICATIONS

Capacity: 50 feet per hour. Safety: N.B.F.U. Pamphlet 58.

Delivery Pressure: 11 in. water column (6 oz.).

Connections: Inlet—1/4 in. pipe; Outlet—3/8 in. pipe.

H. E. LYNN & CO., Inc.

2041 Colorado Avenue Santa Monica, California particularly qualify him for his new position. He is a graduate of the University of Arkansas where he majored in electrical and structural engineering.

Roy A. Bradt, vice president in charge of sales, service and advertising of The Maytag Co., Newton, Iowa, is the new president of the American Washer and Ironer Manufacturers' Association.



R. A. BRADT

He was elected by the general

assembly at the annual meeting of the organization held in January in Chicago.

Mr. Bradt is a past president of Maytag Co., Ltd., of Canada, and director of Globe American Corp. of Kokomo, Ind.

Established in 1846, the Ohio Foundry & Manufacturing Co., Steubenville, Ohio, now embarks on its second hundred years in the manufacture of heating appliances. The firm, specializing in a full line of manual and automatic space heaters for all types of gas, announces several changes in personnel affecting its technical and production staffs.

Charles J. Grayson, plant manager and vice president, has resigned from active duty because of ill health. Mr. Grayson will continue to serve the company in a consulting capacity.

Alex B. Sharpe, great grandson of the company's founder, has been advanced to the post of plant manager.

Added to the firm's technical staff is Harry E. Thompson of Louisville, Ky., formerly with AGA Laboratories

Immediate Delivery of DOMESTIC TANKS

wholesale only

BUTANE-PROPANE

Underground tanks, two-riser type, with float gage.

PROPANE

Above ground tanks

All tanks ASME constructed Par. U-69 and inspected by Ocean Accident & Guarantee Corp., Ltd.

Inquiries Solicited on Truck Tanks and Transports

Write for Prices and Complete Information

GAINES BUTANE EQUIPMENT COMPANY

PHONE 3068

OKMULGEE, OKLAHOMA

Designed for

LPGAS

NEW ALL ALUMINUM

PORT-O-STOVE

Uses Butane, Propane or any mixture of the two with equal satisfaction. Ideal where small installation is required. Write for full particulars.



BOX 1749



Guaranteed against mechanical and material defects

Manufactured by

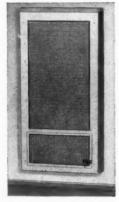
ART METAL APPLIANCE CO.

3106 PARK AVE. . ST. LOUIS 4, MO.

Williams Vented WALL WARMOLATOR

for New Residences.

For Butane, Propane or Natural Gas.



Dual type, 45,000 B.t.u. input.

Color, light ivory. For 2 x 4 studs.

Automatic temperature control with

Wall Thermostat or for manual control

with pilot lighter.

Easily installed—Easily accessible. No pit or basement A.G.A. Approved.

Eligible for F.H.A. loans. Size of face 251/4" wide, 50" high.

Size of recess in walls, 23¾" x 48" high. Projects from wall, 4 inches.

Ask for Circular, Form 211

WILLIAMS RADIATOR COMPANY

"Sponsors of better heating since 1916"
Sales office: 3115 Beverly Blvd.
Los Angeles 4, Calif.
Factory: 1821 Flower St.
Giendale 1, Calif.

and more recently with Peerless Manufacturing Corp. Mr. Thompson now becomes chief engineer.

Ohio Foundry, manufacturers of the "Brilliant Fire" line, is headed by George H. McFadden, president and general manager, who is also a descendant of the original founder.

Richard D. Gruman has been promoted to the "Rego" sales department of The Bastian-Blessing Co., Chicago, announced R. E. Poethig, sales manager of the Rego division.

Since his discharge from the armed forces, Mr. Gruman has had several months experience in the company's inspection department and several in

expediting.

The Petroleum Equipment Co. of Tulsa, is now distributor of the Forster line of burners and torches manufactured by Ransome Co., Emeryville, Calif.

Their territory will include Oklahoma, Nebraska, Kansas, Arkansas, Iowa and Missouri. They plan to contact all LP-Gas dealers in this area with this line of equipment which was developed specifically for use with butane and propane.

Harry S. Leech, member of the headquarters sales staff of the Ruud Manufacturing Co., Pittsburgh, makers of gas water heaters, has been named zone manager of the new Ruud branch office in Cincinnati, it is announced by Frank A. McFerran, Ruud general sales manager.

The zone includes southern Ohio and central and eastern Kentucky.

Roberts & Mander Corp., Hatboro, Pa., makers of "Quality" ranges and kitchen cabinets, have announced the appointment of William Y. "Bill"

WANTED

EQUIPMENT and **APPLIANCES**

Large Sales Organization With Offices in Key U. S. Cities In Direct Contact With All LPG Dealers In United States, Canada, and Mexico, Is Interested In Adding LPG Equipment and Appliances to Their Present Line

This Firm Is Financially Sound and Aggressive Have Experienced LPG Engineers Capable of Handling Any Job— Industrial or Domestic, Regardless of Size

Your Products Will Be Given National Advertising and Direct Selling

Write to Box 260

Butane-Propane News-1709 West 8th Street

Los Angeles 14, California

"It's easy to sell'em show _when you tell'em"

Word-of-mouth advertising in the past has sold thousands of Delta Tanks. Now. if you want to do a bigger business and sell MORE tanks to MORE customers, increase the effectiveness of your advertising by showing your customers a picture of your tanks.

Delta has prepared a series of newspaper mats in two and three column sizes for both aboveground and belowground tanks. These mats are available for your use and will be furnished FREE. Send your order NOW. Remember—"IT PAYS TO ADVERTISE!"

DELTA TANK MANUFACTURING CO., INC.

P. O. Box 1469 Baton Rouge, La. P. O. Box 1091 Macon, Georgia

PROPANE

If You Are Seeking:-

I-A DEPENDABLE SOURCE

2-A UNIFORM PRODUCT

3-A CAPABLE SUPPLIER

4—AN EXPERIENCED MANU-FACTURER

Then inquire—

Cities Service Oil Co.

In Propane also

CITIES SERVICE

means

GOOD SERVICE

CITIES Service Oil Co.

(Delaware)

BARTLESVILLE, OKLA. - CHICAGO, ILL.

Other Sales Offices

Cleveland

Kansas City

St. Paul

Toronto

Hill as district sales representative for New York state, according to R. S. Agee, corporation vice president. Mr. Hill's territory will include all of New York state except Westchester county, Long Island, and the Metropolitan New York area.

Mr. Hill will serve customers in the territory formerly covered by Walter May. Mr. May has resigned to open his own appliance business in Kingston, New York. He will handle the complete line of Quality ranges and steel kitchen cabinets.

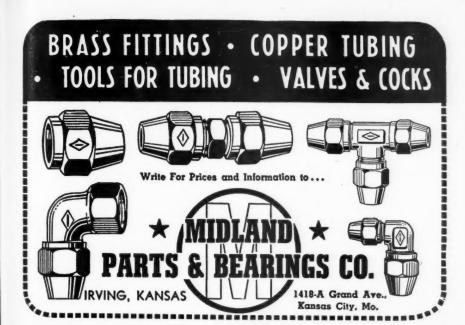
The Connelly Iron Sponge & Governor Co., Chicago, has announced a change in the firm's name to Connelly, Inc., effective Jan. 1, while the manufacturing rights to back pressure valves, governors and manometers have been acquired by the Norwalk Valve Co., South Norwalk, Conn.

D. B. Hodges, former executive assistant in San Francisco, has been named vice president of transportation and supplies for Shell Oil Co., Inc., in New York, it is announced.

Mr. Hodges has been with Shell for more than 20 years, starting in Ventura. Calif.

Increased sales of infra-red gas burners have resulted in Burdett Manufacturing Co. joining the ranks of rapidly expanding Midwestern manufacturers, moving to large new quarters at 3433 West Madison St., Chicago.

According to company officials the recently doubled production capacity is the first phase of a broad development program to include extensive research on new and improved applications of infra-red gas heat, as well as fundamental research on the basic infra-red principle. Additions to the



When you UNLOAD TANK CARS make sure they're EMPTY!

After all liquid petroleum has been transferred from a tank car or tank truck there is still a considerable quantity of vapor left in the tank. This cannot be recovered by a liquid pump. This vapor amounts to from 500 to 1000 lbs. of LP Gas in every tank car unloaded! You pay for this lost poundage as well as its transportation!

This vapor can be recovered with the Brunner LP Gas Unit, a compressor assembly that pumps volatile liquids and recovers their residue vapor. It is a package unit that is outstanding in speed, efficiency, safety and low cost.

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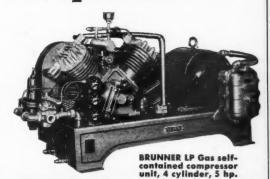
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BRUNNER MANUFACTURING CO. UTICA 1, NEW YORK, U. S. A.







It describes the Brunner LP Gas Unit and contains more illustrations, diagrams, tables and valuable information on the handling of LP Gas than any booklet ever issued.

LOAD BUILDERS

FOR COMMERCIAL COOKING

● Both you and your customers benefit when you sell these nationally-advertised appliances. You make a profit and build your load —your customer gets long and efficient use. Write for catalogs.



Blickman Steam Tables

Stainless steel top and covers. Available with open, semienclosed or fully-enclosed understructures. Choice of top arrangements to suit specific requirements.



Stainless Steel Coffee Urns

"Sealweld" burnout-proof construction. Single urns, two-piece and three-piece batteries available in various capacities. Liners of vitrified stone, heat-resisting glass or stainless steel.



SEND FOR CATALOGS — giving detailed information about these and other outstanding load-builders.

S. BLICKMAN, INC.

MANUFACTURERS OF FOOD SERVICE EQUIPMENT 2101 Gregory Ave., WEEHAWKEN, N. J.

engineering staff have already been made, and further announcements are expected in the near future.

Frank Boice Is Sales Manager For Utilities Distributors

Utilities Distributors, Inc., Portland, Maine, recently announced the appointment of Frank B. Boice as sales manager.

His appointment became effective Jan. 1.

Mr. Boice has been associated with the LP-Gas industry since 1929, having been with the Shell Oil Co. since that year in charge of the marketing of LP-Gas for his company in the area east of the Rocky mountains. He has been an active member of the Liquefied Petroleum Gas Association, having held various positions in that organization.

Indispensable in dispensing



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953 - 61st Street, Oakland (8) California • Cable Address "BRODICO" • Division Offices: Chrysler Bldg., New York City 59 E. Van Buren, Chicago • 302 South Pearl St., Dallas, Texas Representatives and Stocks in All Principal Cities



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SPEED—SAFETY—ECONOMY

EVER-TITE COUPLING CO.

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"when it's an Armstrong ...depend on it... it's the finest of its kind."



VENTED CIRCULATING HEATER No. 4120
Outstanding modern design—cabinet finished in brown vitreous enamel. Produces low cost, dry, clean heat that positively eliminates all moisture from windows and walls. 25" high. 20,000 or 30.000 B.T.U.

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ARMSTRONG PRODUCTS CO.

Quality Since 1899
Dept. BP

Huntington 12, W. Va.

Argil BURNERS



For hot water and coffee urns, steam tables, sterilizers, boilers. Adjustable to your fixtures. Send for free booklet.

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Chicago Combustion Co. 457 West 45th St., New York 19, N.Y. F&E



Hand Torches (Available in 6 Different Sizes)

Superior for Melting Out Lead Joints
"Sell Tomorrow's Equipment
Today"

Write to

F. & E. MFG. CO.

P.O. Box D

Centerville, Calif.

Boils Water

30% Faster

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Free to World War 2 Veterans: Situation wanted ad for three successive months.

HELP WANTED

EXPERIENCED SERVICE, INSTALLATION and bulk truck man, capable of becoming manager, Butane and Propane, near central Indiana and Illinois state line, good future. Box 170, BUTANE-PROPANE News, 1709 West 8th St., Los Angeles 14, California.

NATIONWIDE ENGINEERING ORGANIZAtion requires competent sales engineer to contact and install Propane Air Plants for Utilities and Industrial standby purposes throughout the Southwestern United States. Reply Box 180, BUTANE-PROFANE News, 1709 West 8th St., Los Angeles 14, California.

SITUATIONS WANTED

NINE YEARS EXPERIENCED L.P.G. MAN desires Plant Supervisor Position. Capable of handling Bulk Plant Operation, Cylinders, Propane-Butane Systems. Service Equipment. Box 230, BUTANE-PROPANE News, 1709 West 8th St., Los Angeles 14, California.

HAVE EXPERIENCED GAS CONVERSION crew. Have worked both Propane and Natural Gases. Have worked in the mid-west all summer and would like to get a little further south during the cold, so if you have any cities to convert, let me know. Mr. Bob Hinrichs, 1719 Second Avenue North, Fort Dodge, Iowa.

GAS ENGINEER—EXPERIENCED IN CONstruction, operation and sales, seeks connection with progressive L.P. Gas organization. 55 years of age, best references. Box 280, Butane-Propane News, 1709 W. 8th St., Los Angeles 14, California.

BUSINESS OPPORTUNITIES

ESTABLISHED BUTANE-PROPANE BUSIness in Central California within 150 miles of Los Angeles. Doing over 60,000 gallons sale per month. Includes six room home, nine and one-half acres on main highway, service station and garage completely equipped. Facilities for storage of 8,000 gal. Butane, 4,000 gal. Propane. Truck inventory over \$30,000. \$300 per month income on rentals alone. Reason for selling; sickness. Reasonable terms to financially responsible parties. Write or wire Box 190, BUTANE-PROPANE News, 1709 West 8th St., Los Angeles 14, California. MANUFACTURERS' REPRESENTATIVES wishing to add to their lines should investigate the sales and profit opportunities offered by Rectorseal . . . the nationally recognized and advertised thread and gasket sealing compound. It has outstanding acceptance by all users, because it settles forever the difficult problem of preventing leaks in L-P gas line and appliance connections. It is needed by all Butane-Propane distributors, dealers and appliance manufacturers. Some good territories now available. Write for details of attractive offer, giving past experience and territory covered. Address: RECTORSEAL, 2215 Commerce St., Houston 2, Texas.

FOR SALE—LARGEST DISTRIBUTORSHIP of Butane-Propane in the state of Texas. Distributes over 6,000,000 gallons per year. Gross over \$250,000 per year. Equipment and property inventory over \$250,000. Contracts on hand for over 500,000 gallons per month from refineries. All trucks are less than three months old. If interested, write: Box 210, Butane-Propane News, 1709 West 8th St., Los Angeles 14, Calif.

FOR SALE—SOUTHERN KENTUCKY SUBurban Butane-Propane Gas Business, excellent location and well established concern, bulk storage, cylinder filling plant and cylinders, Butane-Propane systems, three trucks and various equipment. Owner retiring from business. Box 220, BUTANE-PROPANE News, 1709 W. 8th St., Los Angeles 14, California.

FOR SALE—PROPANE GAS BUSINESS. located in the Deep South. Nine years of operations, without the slightest accident of any kind. Plant consists of 18,000 gallon tank, cyclone fence, buildings and land. Approximately 800 customers, over 1700 one-hundred pound cylinders with an allotment of 100 cylinders per month from manufacturer. Two carloads of underground Propane tanks, various sizes. Over a thousand regulators, hoods and so forth. Will sell for \$112,500 (Firm Price). \$50,000 cash; balance over a period of five years with 5% interest. This is a growing business at the rate of ten to fitteen new installations per week, and much more could be done if appliances could be secured. Have no reason for selling other than I am tired and want to catch up with my fishing. Write Box 250, Butane-Propane News, 1709 West 8th St., Los Angeles 14, California.

AN ESTABLISHED LIQUEFIED PETROleum gas business located in good Oregon Coast town. Fuel distribution and appliance sales unlimited possibilities. \$15,000 will handle. Box 200, BUTANE-PROPANE News, 1709 West 8th St., Los Angeles 14, California.

BUSINESS OPPORTUNITIES WANTED

YOUNG AGGRESSIVE SALES ORGANIZAtion covering the Southeastern territory, contacting plumbing and heating supply houses regularly solicits additional lines. References furnished. The Jeff A. Hedden Co., 399 Peachtree St., N. E., Atlanta 3, Georgia.

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ATTENTION, MANUFACTURERS! AM Interested in representing reputable manufacturer in exclusive middle west territory on sales. Have had fifteen years organization and selling experience with electrical and L.P.G. equipment and appliances. Am in financial position and have transportation facilities to merchandise your line through desired outlets. What do you have to offer? Box 270, BUTANE-PROPANE News, 1709 W. 8th St., Los Angeles 14, Calif.

EQUIPMENT WANTED

WANTED — 1,000 GALLON OR LARGER Propane truck. Must be in perfect condition. Write or wire—Suite 301, 1130 Parker, Detroit, Michigan.

ATTENTION—WANTED TO BUY: ESTABlished Butane-Propane business anywhere in U. S. Full details must accompany replies. Write Box 240, BUTANE-PROPANE News, 1709 West 8th Street, Los Angeles 14, California.

WANTED TO BUY—USED PROPANE DElivery truck, 200 lb. W.P. Must be in good condition. Southern Butane Gas Co., 3615 Gallatin Road, Nashville 6, Tenn.

EQUIPMENT FOR SALE

FOR SALE—1942 CHEVROLET BUTANE and 1945 Two Ton Dodge Propane tank trucks, fully equipped, ready to go. Edwards and Ehly Gas Co., Enid, Oklahoma.

FOR SALE—IMMEDIATE DELIVERY ON flared fittings and nuts made of brass bar stock, all sizes. Tubing. Write for prices. Schaaf Brothers, Osborn, Ohio.

FOR SALE—PROPANE TRANSPORT, 1943 International K7 Tractor, Butler twin tanks, 200 pounds working pressure, 3,000 gallons water capacity. Edwards & Ehly Gas Co., Enid, Oklahoma.

FOR SALE — USED BUTANE - PROPANE Cylinders, 40 lb. capacity. For further information write BURDETT OXYGEN COM-PANY, 3300 Lakeside Ave., Cleveland 14, O. FOR SALE—ONE 5 H.P. MOTOR 220-440 volt, 3 phase—class 1 group D explosion proof—1800 RPM on frame connected to M-3 Smith Pump 250 lb. W.P. \$500. One 3 H.P. Fairbanks Morse 220-400 volt 3 phase—class 1 group D explosion proof—motor on frame connected to Model 210 Smith Butane-Propane Pump—250 lb. \$350. One Model 211 Smith Truck Pump with 2" horizontal parts, recently factory rebuilt. \$200. City Butane Company, P.O. Box 868, Stockton, California.

FOR SALE—ONE USED 14x12 INGERSOLL-Rand Compressor, capacity 25,000 feet per hour, can be used with steam or electric motor. Piedmont Gas Company, Hickory, North Carolina.

FOR SALE—30,000 GALLON AND 18,000 gallon water capacity A.S.M.E.U.—69 Propane tanks completely fitted. 4 to 8 week delivery. Also completely designed bulk plants including all accessory equipment. Write for full details. United Petroleum Gas Co. 1032 McKnight Bldg., Minneapolis 1, Minn.

BOTTLED GAS SUPPLIES ARE OUR BUSIness. We wholesale a complete line of fittings, tubing, gas cocks, tube tools, orifices, regulators, pigtails, and tee bars. Write for our Pocket Catalog 46 today. ENGINEERING SPECIALTY CO., INC., 900 W. Ridge Road, Gary, Indiana.

FOR SALE—STOVE ORIFICES, ¼, % and ½ Flare Nuts, and other L.P.G. fittings. Write FUELGAS CO., 5905 N. Saginaw St., Flint, Mich.

FOR SALE—TANKS—FITTINGS—FOR IMmediate Delivery—150 gallon Butane Tanks and Fittings, also 250 and 500 gallon Propane Tanks and Fittings. For Delivery in 30 days—750 gallon and 1000 gallon Propane Tanks and Fittings. KENNEY TANK INSTALLATION CO., 2132 No. Halsted St., Chicago 14. Illinois.

FOR SALE—WE HAVE A FEW 100 LB. ICC cylinders over our requirements, that we would like to place with newcomers in the industry, preferably veterans, who are finding it difficult to obtain equipment. Address: Equipment Division, INDIANA BOTTLED GAS COMPANY, Peru, Indiana.

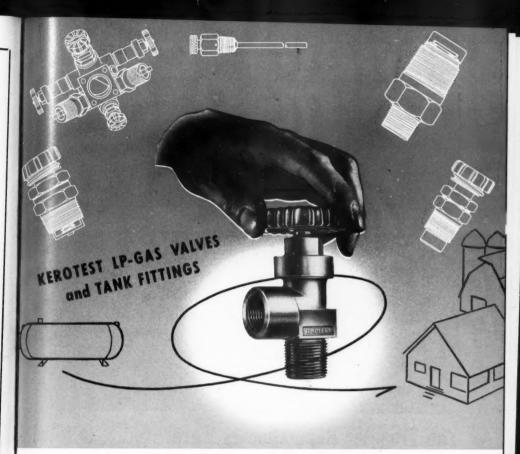
FOR SALE—PRACTICALLY NEW 2200 gallon propane storage tank with top and bottom outlets. TANNER HARDWARE, Burlington, Oklahoma.

FOR SALE—ONE 16,000 GALLON BUTANE Storage Tank made by Delta for sale. New, never been connected. BUTANE GAS SERV-ICE, Box 206, Bremen, Georgia.

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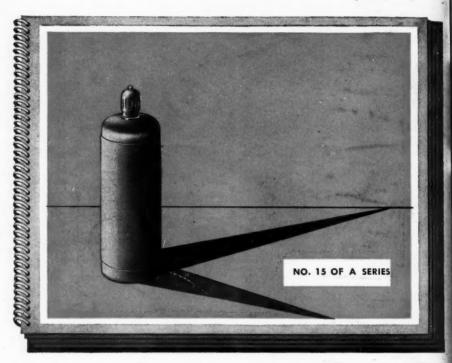
Recommend KEROTEST valves and tank fittings with confidence to your most discriminating buyers of propane systems. For KEROTEST has the extra-safety, extra-dependability features that assure long service, positive control and complete safety under all conditions. Easy to install—easy to service—easy to maintain—Kerotest means lasting satisfaction in your propane installations.

Easy to Install... Easy to Service



KEROTEST MANUFACTURING COMPANY
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A reputation is something to be proud of, but it's a hard task-master. When you have always made "the best" you must continue to make the best. Experience makes it possible, habit makes it natural, customers expect it.

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... so that your Trageser cylinders will be the best of all cylinders. Write, phone or wire for prices. Telephone EVergreen 8-7700. Trageser Copper Works, Inc., 5000 Grand Ave., Maspeth, L. I., New York.

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Most modern LP-Gas Cylinder plant in the country...96 years of making high quality pressure vessels... heavy self-draining flanges, ample threads... thorough pickling removes scale, prevents clogging, provides ideal base for painting.



IT'S THE FIRM THAT MAKES THE CYLINDER THAT MAKES THE DIFFERENCE